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MOBILE PHONES FOR DEVELOPMENT:

How have women in the informal sector used their mobile phones to enhance themselves and their business?

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Abstract:

The research looked into how women in the informal sector made use of mobile phones to enhance their wellbeing and their businesses. The study was carried out within the discourse of information technology for development where it is argued that information technologies have the potential to improve on people's lives. This research sought to examine the possibility for development and growth through the conceptual framework of social inclusion and inclusive growth. This was used as a lens to analyse the data on mobile phone use by women in the informal sector. Qualitative research was conducted in three townships in Cape Town, through purposive sampling of five female respondents. Two respondents were in the hairdressing industry, two were in the meat selling industry and one respondent owned a shebeen. The women were running micro enterprises in the informal sector, as they had no other means to provide for themselves and their families. Mobile phones were incorporated into the daily running of business. The functions of the mobile phone mainly used were voice, text and Internet access through social media and instant messaging.

Four resources were identified as crucial for the promotion of social inclusion and growth that would enhance the economic and social participation of individuals. These were physical, digital, human and social resources. All of the respondents had the physical resource of mobile phones that varied in functions. Digital resources showed information exchange crucial to the businesses and for the women. Human resources were the skills that the women had that would allow for utilization of mobile phones. The social resources referred to social capital present that enabled use of mobile phones. Social inclusion and Inclusive growth through use of mobile phones was possible in the social context in which the women were based. Whilst costly mobile phone credit was a limitation directly linked to mobile phone use, women faced structural challenges beyond the functions of the mobile phone. Women in this study harnessed the potential of mobile phones; together with the resources they already had to improve on their business, impacting on the quality of their lives.

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Mobile Phones for Development: How have women in the informal sector used their mobile phones to enhance themselves and their business?

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A minor dissertation submitted in partial fulfillment of the requirements for the award of the degree of Master of Social Science in Global Studies

Faculty of the Humanities
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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signature:

Date: 26/05/2014

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1 Introduction

In the developing world, information technology has been seen as a tool with the potential to improve people's lives. The discourse of information technology for development (ICT4D) highlights that by people having access to and using information technology they can better their opportunities and circumstances. ICTs include radios, televisions, computers and mobile phones. Mobile phones, inaccessible to individuals at one time, are now the leading widely accessed ICT in developing countries in particular (International Telecommunications Union [ITU], 2013; World Bank, 2012; Otiso and Mosley, 2009). Access and usage of mobile technology has been harnessed uniquely and in new ways for the purpose of health, governance and business activities (World Bank, 2012; Donner, 2008; Deen-Swararay et al., 2013, Frederikson, 2012). The integration of mobile phones in people's lives has been a way in which marginalized members of society may use technology to impact on their lives. Mobile phones have been seen to have a dramatic impact in changing the lives and livelihoods of low-income individuals (Horst and Miller, 2006). Technological change has thus been perceived as a tool for empowerment and poverty reduction.

South Africa's mobile coverage is about 90 percent of the land mass and over 75 percent of the population. More than 75 percent of individuals over 15 years old in the lower income strata own a mobile phone (infoDev, 2012). The potential of information technology to change circumstances is an increasingly accepted notion by leaders shown by the undertaking to ensure a closing of the digital divide (Sandys, 2005). The digital divide, has been understood as an issue beyond accessing of new technologies but rather the socio-economic issues impacting on the use of technology (Pieterse, 2010). The digital divide is also understood in terms of gender inequalities, where by one finds inequalities between men and women based on social and cultural context limiting women's access and use of mobile phones (Gillwald et al, 2010, Sandys, 2005; Sorenson, 2002). One way of overcoming this divide is through digital inclusion, which can contribute to creating the conditions for social and economic inclusion.

In developing economies, poverty reduction and opportunities for development and growth are a central concern to government, civil society and individuals. In order to achieve progress in development and growth, women have been seen to be the focal point for change (Jain and Elson, 2011). Participation in economic activities is identified as one of the ways of reducing poverty. The informal sector, with its ease of entry, thrives as the root of livelihoods for many of the marginalized people excluded in society such as women and youths. Women form a significant proportion of individuals in the informal sector. They are mainly found to be self employed or engaged in home based work (Chen et al., 2005). When women enter into informal work, it is seen as a way in which they may be able to bring their incoming earning activities and their family responsibilities together (Beneria, 2011). Mobile phones may enable participation in the informal sector to be effective in reducing poverty and developing women. Work on developmental use of mobile phones highlighted the way in which women have used mobile phones to begin a new enterprise within the informal sector or use it to enhance an already existing enterprise (Kyomuhendo, 2009; The Economist, 2009; UNCTAD, 2011). Mobile phones have been seen to have the potential to empower women in the process of poverty reduction (Buskens and Webb, 2009). However inequalities in society and in the informal sector often constrain the potential for development and growth. Poor, less educated men and women in the informal sector face constraints, with gender differences, inequalities impact more on women than men. In looking at ICTs, in and of themselves, they do not contribute to inequalities but are used within such a context (Gillwald et al, 2010; Moyo and Deen-Swaray, 2013).

Given that ICTs have the potential to support to improve people's lives, possibly supporting social and economic inclusion of women concentrated in groups who are economically and socially excluded, it is important to understand the role access and use of technology may contribute to development and growth. The purpose of this study is to explore how women make use of mobile phones in the informal sector that would enhance their business and overall their lives. The study builds from research that has been done on African countries including South Africa by Research ICT Africa (RIA) on the engendered use of ICTs. The main

research question was 'How does the use of mobile phones by women in the informal sector enhance themselves and their businesses?' Three sub research questions were posited in further breaking down the main research question:

- 1) What influences the way in which women make use of mobile phones for the purpose of business in the informal sector?
- 2) How have women experience developmental and growth gains in using their mobile phones in business in the informal sector?
- 3) What challenges do women face that may limit their development and growth from business in the informal sector?

Research on selected African countries carried out by Research ICT Africa highlighted that level of education and income impacted on the way in which women would be able to use mobile phones for the purpose of inclusion. The findings by Gillwald et al. (2010) showed that use of mobile phones was extensive for men and women but income and education limited use of mobile phones due to high costs for women with lower income. Women were seen to spend more of their limited income on their mobile phones. The study by Deen-Swarrray et al., (2013) focusing on mobile phone use pointed out the difference in use patterns from a gendered perspective. The study found that women generally have less access to mobile phones and this widens as the technology and services become more sophisticated and expensive. This was attributed to the point that many women are found to be concentrated in the lower income category and have limited education. In the informal sector assessment of gender and entrepreneurship, whilst the informal sector provided an opportunity for inclusion, inequalities existed between men and women such as education and income that limited women's use of ICTs (Moyo and Deen-Swarrray, 2013).

The study aims to assess the impact of the use of mobile phones on women and their enterprises in terms of development and growth. Development and growth will be focusing on the micro unit of the individual, using the conceptual framework of social inclusion and

inclusive growth. A qualitative study was the selected choice of methodology focusing on five black South African women, self-employed or in business partnerships in the informal sector. The dissertation is broken into four main chapters, the literature review, methodology, findings, and discussion and conclusion. The literature review provides the context of the study with the current debates around ICT and gender. The methodology section explains the adoption of the qualitative approach and the process of data gathering. The findings chapter explains the key findings from the data gathered. The final analysis and conclusion section highlights the analysis of the findings through the conceptual framework of social inclusion. The overall summary and the limitations of the study are remarked on in the final conclusion. Recommendations are suggested that would improve the development and growth of low-income earning women in the informal sector.

2 Literature review

2.1 Introduction

The literature review highlights the debate around use of mobile phones for development by women and in micro-businesses. It discusses how the mobile phone has been used for purposes of business and the resulting impact. In order to frame this study, the literature will begin by providing the country context of the research. The review shall then move on to discuss the field of Information Communication Technologies (ICTs) and development. The role of mobile phones for micro-businesses is highlighted. In looking at the developmental use of mobile phones, we assess women from a marginalized context of the informal sector. The discussion on women and ICTs is brought to the fore as it influenced the conceptualization for this research. In conclusion, I provide the significance of this study and discuss the theoretical approach to development and growth through the lens of social inclusion and inclusive growth.

2.2 Country profile

South Africa is one of the emerging economies in the world, with the largest economy in Sub-Saharan Africa. It has an estimated population of 51 million and is ranked at the medium human development level (HDR¹, 2013; StatsSA, 2012). The population, when broken down by gender, consists of 48.2 percent male and 51.7 percent female, highlighting the predominance of the female population. However despite its medium human development level there still exists a concerning level of inequality; according to 2009 estimates, 31.3% of South Africans leave below the poverty line (StatsSA, 2010). In terms of the highest level of education, 33.9 percent of people 20 years and older had some secondary education, whilst only 11.8 had higher education qualifications. The females aged 15 and older in the black and colored population are found to have the highest levels of functional illiteracy (StatsSA, 2012).

South Africa is described as having a dual economy. Dual in that it has a high level financial and industrial economy known as the 'first economy' operating alongside "an underdeveloped informal economy known as the 'Second economy'" (GCIS, 2013: 134). In terms of its labor market, South Africa has a large labor force, comprising of 18.22million people. The

¹ HDR-Human Development Report

economically active population, defined as being between the ages of 15-64, stands at 65.6 percent of the male population and 65.4 percent of the female population (StatsSA, 2013). There are currently 13.62 million people employed; 9.5 million are in the non-agriculture formal sector and 2.12million in the non-agriculture informal sector (StatsSA, 2013). There are 4.6 million unemployed people and 2.3 million discouraged job seekers. The informal sector covers employee work arrangements and business ownership. The informal sector jobs are mainly concentrated in community and social services and manufacturing (StatsSA, 2013). The specific forms of employment include vendors, home-based care workers and the self-employed amongst others (www.led.co.za).

The informal sector in South Africa is considered relatively small in spite of the high levels of unemployment. The assumption is that this is due to constraints such as high levels of regulation, criminal activity, and lack of government support (Rogerson, 2004; Kingdon and Knight, 2004, 2007 cited in Yu, 2012: 158). Entrepreneurship in South Africa is valued as a way of achieving economic growth and development, focusing on small to medium and micro-sized enterprise (SMME) as was of reducing inequality (www.thedti.gov.za; Ligthelm, 2008). Policies have been designed to assist growth of enterprises and ensure that financial and non-financial assistance is available for sustainable prosperity that will benefit the country as a whole (www.thedti.gov.za). The annual review of SMMEs between 2005 and 2007, pointed out that the number of participation of women is higher in the informal sector at 52 percent, than formal sector at 31 percent (the dti, 2008). In the context of South Africa participation is being measured in terms of all economic activity in the informal sector.

With respect to the mobile phone market in South Africa, there are 5 network providers, four mobile network providers and one mobile virtual network operator. The four mobile network operators are Vodacom, MTN, Cell C and Telkom mobile. Vodacom and MTN are seen as the giants in the industry, jointly commanding a market share of 80 percent. Cell C and Telkom have focused on capturing the lower income market by providing the lowest pricing range (Gillwald

et al., 2012). Virgin Mobile is the only MVNO (mobile virtual network operator), which has mainly focused on the high-end youth market. The ICT vision 2020, by the South African government, recognized the need to bridge the digital divide in the country and to harness ICTs for developmental purpose. Looking at households, mobile phones are the commonly owned ICT per household followed by television and radio, as indicated in Table 1 (Gillwald et al, 2012). The prepaid phone package is predominant in the lower income strata, rather than contract packages (infoDev, 2012). It is important to distinguish between ownership and access to mobile phones. In Table 1 the measure is ownership per household but does not necessarily translate to individuals in the household having equal access.

Table 1: Summary of ICT access in South Africa from Census 2012 and RIA ICT Survey data 2011-12

	Census data		RIA Survey data	
	2006	2011	2007	2011-12
Households with fixed line	18,5%	14,5%	18,2%	18,0%
Households with computer	15,6%	21,4%	14,8%	24,5%
Households with radio	76,5%	67,5%	77,7%	62,3%
Households with television	65,5%	74,5%	71,1%	78,2%
Households with Internet		35,2%	4.8% (household) 15.0% (individual)	19.7% (household) 33.7% (individual)
Cell phone ownership (household)	72,7%	88,9%	62,1%	84,2%

Source: (Gillwald *et al.*, 2012: 49).

While mobile phone access is amongst the highest in the continent, the cost of mobile service in the prepaid market have been historically high, which impacts negatively on those in the lower income bracket. Cell c offers the lowest price call of 0.99c whilst in comparison MTN's lowest tariff plan cost ZAR1.20 per minute. Despite economies of scale and scope the dominant mobile network operator is actually not the cheapest (Gillwald *et al.*, 2012). Mobile phones are mainly used for; making and receiving phone calls, missed calls or placing "please call me"-messages, sending and receiving text messages (SMS) and organizing day-to-day lives (InfoDev, 2012). South Africa has a high Internet penetration rate, by continental standards but considered lower than most other lower middle-income countries. The Internet is mainly accessed through mobile phones, as fixed broadband is expensive. For those 15 years and older with access to the Internet, 70 percent accessed it from their phones in the last 12 months of the time the research was conducted (Stork *et al.*, 2013)

The distinction between rural users and urban users is important to bear in mind when looking at mobile phones and development. Qualitative study based on focus groups revealed that low-income urban users are aware of available applications, make use of social media and browse the Internet for jobs and educational grants. Rural users of similar income levels make use of micro browsing because of its convenience, but are sceptical about the importance of mobile applications. Mobile users without Internet access rely on traditional media for information and voice or text messages for communication. However, 71% of the low-income users have a mobile device that can access the Internet. There is a high use of social media with 50% of mobile users having signed up for a social network (InfoDev, 2012).

Table 2. ICT and informal business use. RIA Informal Sector ICT Survey data 2011-12

		Informal businesses
Mobile phone use	Use private mobile phone for business use	27.7%
	Business has dedicated business mobile phone	5.2%
	Business owner has both a private and a business mobile phone.	14.7%
	Business sends text messages for business purposes	40.3%
	Receive text messages for business purposes	21.4%
	Business sends or receives money via mobile phone	0.8%
Other ICT ownership	Computers	11.6%
	Internet access	10.6%
Business advertises via	Newspapers	4.4%
	Twitter, Face book	3.7%
	Mobile phone SMS	2.6%
	Radio	2.2%
Businesses that have Internet access	Receive orders via Internet	21.7%
	Purchase products/services via Internet	27.1%
Access to bank account	Dedicated business account	20.5%
	Private account for business purposes	17.8%
Most common means of sending and receiving money	Pay myself (in person)	56.1%
	Bank	24.4%
	Send cash with someone	13.7%
	Western Union/MoneyGram	5%
	Post Office	0.5%
	Mobile money	0.4%

Source: Gillwald *et al.* 2012: 71.

Mobile phones have been identified as the main means of communication for individuals in the informal sector in South Africa as well. This study aims to look at how the uses of ICTs, with a focus on mobile phones, are used by individual women to benefit them and their businesses. Table 2 indicates the mobile phone use by the informal business in South Africa. Businesses mainly send text messages for business purposes via mobile phones (Gillwald et al., 2012).

2.3 Information Communication Technology for Development

ICTs are important perceived as important because of the way they can be used to improve the lives of people according to their needs. The term ICT has been used to cover the technological information and communication that gives rise to the development of the 'information society' that has become a central concept for objective national policies around the world. Being part of the information society is seen to lead to changes in social interaction, economic and business practices, amongst others (Sandys, 2005). Mobile technology, including mobile phones, for development is part of the discourse of ICT4D. The mobile phone is the technology that has grown in use especially in developing countries. The conceptualization of mobile phones is discussed further in a later section of this chapter. The Economist publication of 2009 as cited by Otiso and Mosley (2009: 99) summarizes the evolution of the mobile phone as a tool:

"Once the toys of rich yuppies, mobile phones have evolved in a few short years to become tools of economic empowerment for the world's poorest people. These phones compensate for inadequate infrastructure, such as bad roads and slow postal services, allowing information to move more freely, making markets more efficient and unleashing entrepreneurship".

In 2000 the Economic and Social Council of the United Nations formally recognized the importance of information technology, in development in the growing knowledge based economy (Sandys, 2005). Ensuring access to new technologies for all was described as an

urgent matter in the millennium development goals² in order to bridge the digital divide. A total of 175 governments endorsed the drive to make access to the information society possible for all at the World Summit on the Information Society in 2003 (Sandys, 2005).

The World Bank report of 2012 on ICT4D pointed out that the mobile phone had become indispensable, as they were debatably an 'ubiquitous tool (World Bank, 2012: 3). In comparison to the developed world, developing countries are seen to be in the best position to exploit the benefits of mobile communications (World Bank, 2012). In 2013 mobile subscriptions stood at 6.8 billion with 3.5 billion in Asia-pacific region (ITU, 2013). Thus the statistics demonstrate the extent of penetration of mobile phone coverage to the developing world. Mobile phones are also providing a source of Internet access, through mobile broadband. Internet access through mobile phones has been seen as way of further connecting people to the information society. Mobile broadband has increased overtime in the world; in Africa it has increased from 2 percent to 11 percent coverage from 2010 to 2013 (ITU, 2013). The present day digital divide is no longer seen just as access to mobile phones but rather to Internet and in particular broadband services (UNCTAD, 2013).

However implementing ICTs in development must be viewed critically as there are other factors at play that determine whether the potential of ICTs may be used. The notion of bridging the digital divide by providing access to technology is criticized by Pieterse (2010) moving away from the issue of socio-economic inequality that cannot be simply fixed by technical solutions. Critics argue that there is no seen improvement from implementation of technology that it is assumed to bring (Sorenson, 2002). In mobile usage, it is a supply driven industry where the mobile network operators are not greatly motivated to tailor their services according to the demands of the poor (Duncombe, 2012). The advancement in technologies such as smart phones and 3g networks are likely to create further divides rather than bridge the digital divide (Duncombe, 2012; Pieterse, 2010).

² Millennium development goals- Goals pledged by member states of the UN to eradicate poverty and deprivations. They consist of 8 goals for 2015 amongst them to improve maternal health, achieve universal primary education and promote gender equality and empower women (www.undp.org)

2.3.1 Developmental uses of mobile technology

Mobile phones are popular in Sub-Saharan Africa due to the following reasons; their mobility even in remote areas, flexibility in choice as people can have a convenient prepaid plan, rapid roll out, adaptable for a paperless society, and requires low level skills to install and use (Otiso and Mosley, 2009). Mobile phones have effectively over taken the landline in Africa (Aker and Mbiti, 2010). It is more costly and time consuming to put up a land line especially in developing countries with poor roads and vast distances. Where individuals do want a fixed line, for business purposes perhaps, they are either unavailable or too expensive (Aker and Mbiti, 2010; Esselar et al, 2006).

Warschauer (2003), points out the need to recognize technology in its embedded context, as it is intricately linked to the social realms in which it is used. Mobile phones allow for connectivity between people and depending on context, the way they are used differs in developing countries. Mobile phones provide opportunities in which individuals and groups may begin to possibly transform the situations they find themselves in, such as improving human and economic conditions (Svenson and Wamala, 2012; World Bank, 2012). Mobile applications that are designed locally and based on the needs of the targeted community are seen to be better able to address the challenges of the particular developing country than those transported from elsewhere (Donner, 2008; World Bank, 2012).

Mobile phone use in development may be found in agricultural initiatives, health and access to finance. Specific examples for these segments are used by rural farmers to be able to gain access to pricing information through text messages; mothers receiving medical reports on the stages of their pregnancy by phone, and migrant workers sending remittances without using banks. One may find that those sending money through use of mobile phones may be financial excluded, that is either not holding a bank account or lacking access to banks in a convenient area. Mobile phones have also been used in election monitoring and unpopular regimes toppled with the help of mobile phones (World Bank, 2012).

ICTs have socio-economic benefits that have significance on trade and development in the informal sector. At the United Nations Conference on Trade and Development, (UNCTAD), Frederikson (2012) pointed out that mobile phones were the preferred tool among small businesses. The mobile has gone beyond simply being used for voice calls. It has evolved to use access to the Internet through mobile Internet, voice over Internet protocol (VOIP) and social media access with mobile versions and mobile money predominant in Africa (Frederikson, 2012).

2.3.2 Small business in the informal sector

Mobile phones benefits are experienced by businesses operating in the formal and informal sector. This study focuses specifically on women operating in the informal sector as most women who operate small business are based in the informal sector in comparison to those in the informal sector (the dti, 2008). The informal sector has been seen to provide a form of income in situations where standard employment practices and entrepreneurial activities often leave the individuals in need of an alternative source of income (Hart, 2010). It may also be a way in which individuals may be able to supplement their income or where individuals can balance their work and life (Yu, 2012). The sector is a heterogeneous sector that is complex to define and faces its own limitations. In the discourse of development the informal sector has been seen to play the role of increased production, job creation and the fight against poverty (Palmer, 2004). According to Verick (2006: 7) the key distinctive features of informal sector businesses are the low set up and low entry costs; small scale operations with a few workers; skills required for business gained outside formal education and labor intensive work in production of goods and services.

In the informal sector this study looked at the practice of business ownership rather than employment in terms of contractual agreement and social protection. The understanding of the informal sector is drawn from the conceptualization of a group consisting of the ILO, the international Expert Group on Informal Sector Statistics (called the Delhi Group), and the global network of Women in Informal Employment: Globalizing and Organizing (WIEGO) (Chen, 2012). They subdivided the large and heterogeneous sector into wage employment and self-employment. Informal self-employment includes “employers in informal enterprises, own

account workers in informal enterprises, contributing family workers and members of informal producer's cooperatives" (Chen, 2012: 7).

The reasons why individuals start a business in the informal sector is important to know so that one may be able to understand the way in which women would manage their business. People are either driven by necessity or by opportunity (Harding et al., 2006; Minniti et al., 2006; in Deen-Swararray et al, 2013). Ligthelm (2008) also points this out as individuals turn to informal businesses as a survivalist strategy where the formal sector fails to provide formal job opportunities. Necessity is when starting a business is considered a push into it as there are no other choices available whilst opportunity is seen as pull, where businesses seek to gain from an economic opportunity in the informal sector (Williams and Nadin, 2010 in Deen-Swararray et al., 2013). The Research ICT Africa 2011/12 study, found that women in South Africa, have been 'pushed' into the informal sector as a way of providing for themselves and having gainful employment (Moyo and Deen-Swararray, 2013).

Informal sector businesses may also be perceived as livelihood enterprises or growth oriented enterprises. Liedholm and Mead (1999) describe the livelihood enterprise as mainly in urban and rural areas of developing countries. The livelihood enterprises in the urban areas are mainly informal and service based. Growth enterprises have more varied activities with occupations around areas of agricultural production, personal services and skilled trades. Such growth enterprises are mainly seen to be located in urban areas with in various sectors (Duncombe and Heeks, 2008). With the livelihood enterprise for women owners, a proportion of the income may be used for household funds and upkeep of family before being reinvested into the business. The funds may also be used as a way of fund raising for purchase of physical assets. Livelihood enterprises would benefit from any improvement on the productivity of their businesses, which would be seen to have a positive impact on their family (Duncombe and Heeks, 2008). Growth enterprises on the other hand provide relatively secure employment but "it is estimated that only 1 percent of enterprises in sub-Saharan Africa that start out very small succeed in expanding to employ 10 or more workers" (Duncombe and Heeks, 2008: 12). This

highlights that whilst employment is relatively secure in growth enterprises, it does not necessarily lead to employment creation. Growth enterprises have wider needs for their enterprise which show a degree of business maturity and they may already be using ICTs (Duncombe and Heeks, 2008). Growth oriented business may benefit from marketing capabilities of mobile phones whilst subsistence based businesses may not require a marketing drive (UNCTAD, 2011).

2.3.3 Mobile phone usage in small businesses

Owning a mobile phone has been adapted as a means to earn income or as a tool to enhance an income earning strategy. An example of using mobile phones to earn income is seen through those who owned the mobile phone providing access to those who did not have, at a price. In Uganda, rural women were providing a service as mobile payphone operators with their initial access to mobile phones. These women had made use of mobile technology innovatively to engage in a business venture considered recent and distinct (Kyomuhendo, 2009). Women were selling phone calls for profit with basic equipment of the phone and an antenna (The Economist, 2009). A case study of a village lady in Uganda shows how she used the mobile phone to by providing a service for a poor community, which cut out associated costs of accessing information through other means such as travelling or waiting for the post (The Economist, 2009). Mobile phones usage in business also provided for instrumental use and intrinsic value to the individual (Donner, 2003). In a study on small business owners in Rwanda and their use of mobile phones, they were used as a convenient method of communication on the one hand. While on the other hand, a sense of social gratification was gained as the phone was seen as a status symbol of achievement. This allowed them to be able to keep in touch with family and friends at their convenience (Donner, 2003).

A survey by Donner and Escobari (2010) reviewed 14 studies focused on the use of mobile phones by micro and small enterprises in developing countries. They pointed out that the beneficial use of mobile phones is mainly for existent small businesses rather than new small businesses. Increased productivity and social or structural change in terms of information flow

was experienced by established small businesses when they used mobile phones (Esselar *et al*; 2006; Donner and Escobari, 2010). In Jensen's (2007 in Donner and Escobari, 2010) research on Kerala fisherman in India, the use of mobile phones resulted in a reduced price dispersion, which benefited both the consumer and producer as a result of access to information. Fishermen were able to accumulate lists of buyers in their mobile phones, determine the best price and where to sell their catch. The study by Jagun, Heeks and Whalley's (2008 cited in Donner and Escobari 2010) role of mobile phones in mediating supply chains in the Nigerian market for traditional hand-woven ceremonial cloth found benefits in being able to execute long distance calls and cutting costs of travel. Mobile phones facilitated increased marketing and sales within already existent supply and customer networks. In a survey carried out on 13 countries by Research ICT Africa, they pointed out mobile phones were the most used technology in maintaining customer relationships and were seen as ways in which productivity was enhanced (Deen-Swarrray *et al*, 2013, Esselar *et al*, 2006). These studies mainly focused on the value based analysis on impact to the business, but leaving a gap in the research on the focus of the individual or household as a unit of analysis.

Apart from the increased flow of information and provision of marketing and sales, mobile phone services have been created to address financial needs of small business. The mobile money system seeks to provide a financial service for those without bank accounts or limited access to financial services. Mobile money innovations have been used in developing countries and especially on a large scale in countries such as Kenya and Zimbabwe (Maree *et al.*, 2013: Levin, 2013). In research done on economic and social upgrading, mobile money is seen as an option that provides for the opportunity for up-liftment (Maree *et al.*, 2013). The mobile money system in Kenya is one of the most successful initiatives in developing countries. The application named M-Pesa, allows for the transfer of money from one mobile phone to another, with the receiver collecting money from one of the thousands of M-Pesa agents situated all over the country. M-Pesa was initially intended for the collection of customer loan repayments but ended being used as a remittance system, sending money to relatives and dependants from urban to rural areas. M-Pesa also provides a route for international

remittances as customers may receive international transfers from the UK, Canada and Italy (Safaricom, 2012 in Maree *et al*, 2013). In the case of Zimbabwe, the mobile money service, EcoCash, was strategically implemented to provide a service to the informal sector that provides for a large percentage of the country's economic activity (Levin, 2013). A convenient and safer payment method was seen as a necessity. Within 18 months of its launch the initiative had 2.3 million users (Levin, 2013). The findings on research done by Mbogo (2010) in Kenya, on the acceptance of mobile money technology by micro businesses was as a result of its accessibility, cost, support and security. In South Africa uptake of mobile money has been slow with only 0.4 percent of small business in the informal sector making use of the service for payment with regards to suppliers and customers (Gillwald *et al*, 2012).

2.4 Women and ICTs

In looking at women and ICTs, there is a need to close the gendered digital divide so as not to increase existing inequalities between men and women (Sandys, 2005). The gendered digital divide focuses on the difference of the level of access and use of ICTs, including mobile phones, by men and women in particular from lower income strata (Sandys, 2005; Gillwald *et al*, 2010). The level of access to mobile phones has marginally become smaller however the way in which women used mobile phones differed from men. The survey on ICT usage in South Africa shows that about 86 percent males and 82 percent females acknowledge owning a mobile phone, showing a 4 percent minimal difference (Gillwald *et al*, 2012). However in terms of how they use their phones, more males than females have a phone that can access the Internet, browse the Internet and access social media in South Africa (Gillwald *et al*, 2012). Thus showing how use of mobile phones was different between men and women (Sorenson, 2002). When one brings in the element of age in the use of mobiles, there is a reduced gap between males and females of a younger generation but significant amongst the middle aged and elderly (Sorenson, 2002).

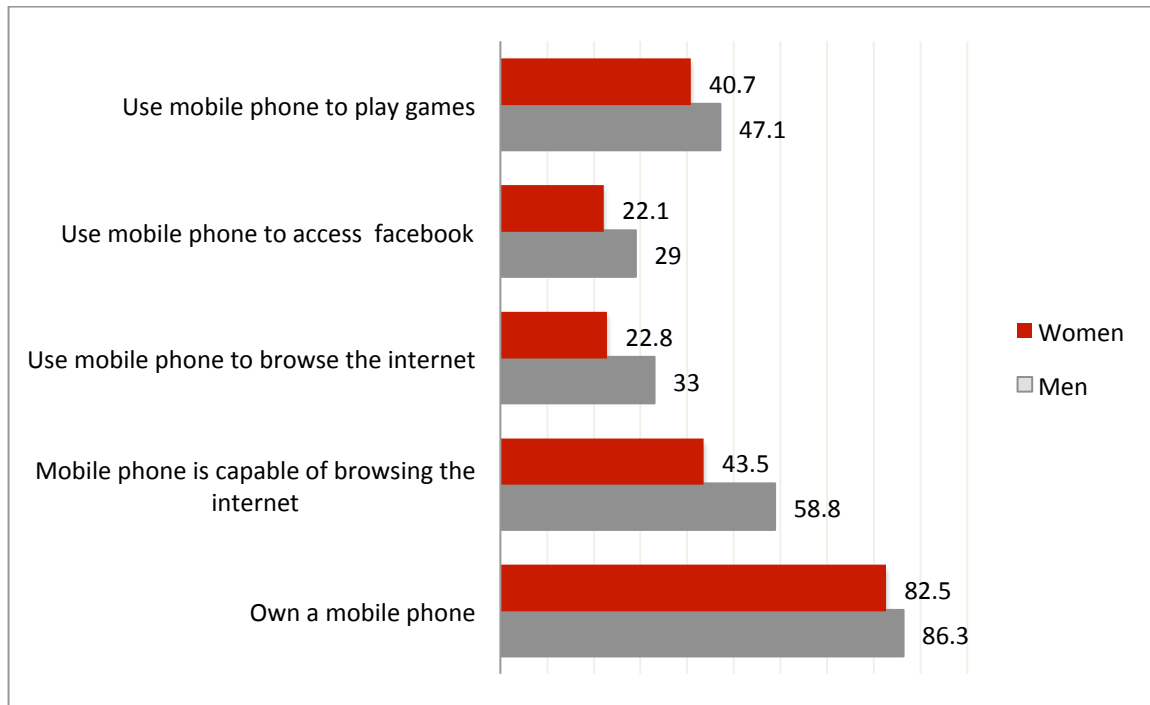


Figure 1: Gender differences in ownership and use of mobile phones. RIA ICT Survey data 2011/12 in Gillwald *et al.*, 2012.

The way women use ICTs is important for development initiatives that incorporate technology. Women have been a focal point of development in order to reduce poverty and ensure responsible wellbeing. Feminist theories of development such as Women in Development, Women and Development, and Gender and Development have been used as the main theoretical concepts in understanding development. Gender and Development theoretical paradigm takes into account the relations between men and women, noting that development focused on women needs to take into account the way that power relations may be gendered (Serote *et al.*, 2001). Women have different relationships within the informal sector and cell phone use that often impinge on their possibilities for development and growth. Thus it is important to recognize the way in which women benefit in the context of unequal power relations from mobile phones. One may also look at the challenges that women face in the informal sector and their use of mobile phones.

2.4.1 Benefits and limitations for women in use of mobile phones

Women's accesses to economic opportunities are seen to have a positive impact on reduction of poverty in households (Kabeer, 2012). However there are challenges that women face as business owners in the informal sector based on their gender. Patriarchal societies, which may be understood as men maintaining economic and social privilege over women, present a challenge for the possibilities of women (Moser, 1993). These patriarchal structures tend to place limitations on the freedom of women to actively engage in entrepreneurial activities (UNCTAD, 2011). Chen *et al* (2005), highlights the existence of segmentation according to gender as well as a gender earnings gap in the informal sector. Based on an assessment of various studies and official data, they found that men mainly occupied the highest earning segment in entrepreneurship. Women were located in the low earning segment, which consisted of unpaid family work and industrial out workers (Chen *et al.*, 2005). The limitations to women's opportunities were based on their responsibilities of raising children, taking care of family as well as unequal access to resources in contrast to men (Heintz, 2012).

Benefits for women using ICTs

Given these challenges faced by women in their participation in the informal sector, one can go on to assess how they have benefited from having mobile phones in small business. The field of gender and ICTs highlights the empowerment of women as a result of ICT use. Individuals become more connected thereby providing them with a way of economic inclusion leading to social, political and economic empowerment (UNDAW, 2003 cited in Gillwald *et al.*, 2010). ICT tools have been identified as being used by women owned small businesses in overcoming gender-based barriers (UNCTAD, 2011). In a compilation of studies on 12 African countries focusing on ICT and women, the attention has been on understanding if and how women's empowerment is occurring as a result of use and access to ICT (Buskens and Webb, 2009). Women used ICTs as a way of controlling their time and space in their professional and personal lives (Buskens and Webb, 2009). In a review on the role of ICT impact on women in India, Jain (2004) found that empowerment was achieved through access to information, providing a platform for women to voice their concerns and using it to meet their developmental needs and goals. Empowerment is being achieved through ICT-based

employment such as call centres and use of ICTs in entrepreneurship. In one case study, women were empowered through a higher level of respect in their communities as they gained knowledge and achieved solidarity in their community (Jain, 2004).

The benefits for men and women in their businesses are similar in terms of saving time on travel and increased business volume (Sane and Traore, 2009). In a period where there were a large number of women in Senegal participating in the informal sector, there was a recorded high in the use of mobile technology. Having access to mobile phones was seen as a way of empowering women, changing the social relations between sexes. The mobile phone was seen to enhance the entrepreneurial activities of women given a traditional social context of hierarchies in an industry that privileged men over women. Mobile technology was a tool that was adapted in a way that increased women's self-sufficiency (Sane and Traore, 2009).

ICT have been seen as a tool to impact on rural women's daily lives through access to information. In Uganda, Women of Uganda Network, WOUGNET, combines the use of two ICTs to support women. They use radio and mobile phones to improve access on rural women entrepreneurs. Special radio shows are broadcast to the women over a community station and the women, in groups, have a mobile phone with which they can call into the radio station and ask questions (UNCTAD, 2011). They have also provided a way in which rural women may generate income. In Uganda, a telecentre project in rural areas was implemented to provide women with information they required for their entrepreneurial activities. This economically empowered women to make better decisions that would enhance their income that they would reinvest in their households (Bakesha *et al.*, 2009). In a study by Piontak on mobile use in the agricultural sector by women in rural Uganda, women achieved social upgrading, as there was an increase in social capital through access to resources, social networks and opportunities to improve on living standards (Piontak, 2012).

Limitations for women in using mobile phones

Reducing gender inequalities in access to technology is seen as a way of ensuring gender empowerment. Factors such as language, lack of computer literacy and skills hinder use of ICTs in especially in developing countries (Sandys, 2005). These are capabilities seen as limitations in the use of mobile phones. However there is a need to be critical of assuming that women having access to ICTs similar to their male counterparts will automatically result in a change in social inequalities. A study on Kenyan women entrepreneurs by Munyua and Mureithu (2008 cited in Munyua, 2009: 119) showed that mobile phones had an influence on the effectiveness and efficiency, but the question remained on whether it effectively contributed to women's empowerment. The way women access and use of ICTs cannot be understood without taking into account their gendered positions and identities. Bearing these in mind highlights how gendered identities relate with their political economic situation (Buskens and Webb, 2009).

Making use of ICTs is not always similar for men and women, this may be attributed to inequalities or social and cultural nuances that limit extent of use. These cultural limitations may also be due to patriarchal social practices. Cultural and social nuances that limit the access and use of ICTs can only be identified from a specific context when we take gender into account. Gillwald *et al* (2010) point out that limitation to access and use of ICTs is found nuanced in accepted social practices and cultural barriers such as harassment in public spaces, too much work and the idea that women or men can use ICTs in a certain way. The Gender and Development approach shows the need to bear in mind gendered power disparities that may be present in their political, socio-economic and domestic forces, which may limit their inclusion (Serote *et al.*, 2001). Gender inequalities in education and income level impact on access and use of ICTs among males and females (Gillwald *et al.*, 2012; Sorenson, 2002). Women in rural areas or the lower income groups are more likely to have an unequal access to ICT access and usage on the basis of income, education and social position (Gillwald *et al*, 2010). It was found that women were likely to spend more of their income on mobile phones, of which this was spending from a limited income (Gillwald *et al.*, 2010).

The gendered digital divide is seen in small business in the way those run by men are seen to make more use of mobile technology than those run by women (Deen-Swarrray *et al.*, 2013). In a national research survey that included South Africa by Research ICT Africa, focusing on women and entrepreneurship, it was found that education and income impacts on the use of ICTs in business (Moyo and Deen-Swarrray, 2013). For example women with primary and secondary education levels have limited skills required to fully utilize ICTs in their businesses. Structural constraints that women face are present in the informal sector which thus limits their ability to fully participate in economic growth and development, limiting their use and access of ICTs (Moyo and Deen-Swarrray, 2013). However there is a need to understand the limitations of inclusion beyond quantifiable measures of income and education.

Whilst mobile phones empower women it “was found that men frequently felt that the new freedom of women to have mobile phones was destabilizing their marital relationship” (Huyer and Sikosa, 2003 cited in Munyua, 2009: 124). This perception was seen to exist in unequal gender power relations. In a study on the use of mobile phones and Internet use by women in Zambia, men were seen to be monitoring use by their partners and determining whether their partners should even continue to use the technology (Wakunuma, 2007 cited in Munyua, 2009:124). However the findings did not specify if this was the general perception of all men in the research, hence one must not take it as a general practice amongst men. In a study on farmers in Uganda, Wamala (2010) found that the cultural context in which one is based in influences the access and use. Wamala (2010) points out that where husbands control resources; the wives will have to look for cheaper centres to make phone calls, as their income is limited. Whilst both men and women have access, one can see the nuanced practices that might impact on the extent of the use.

2.5 Conclusion

On the whole, the literature review shows the importance of incorporation of mobile technology for mobile development to small businesses and women. For women the gender and ICT discourse stresses empowerment that may take place in gendered power paradigms. However there were still limitations that women faced in access and usage in cultural contexts. As Gillwald et al., (2010, 4) point out, “research should address the linkage between access to and usage of ICTs and other connected factors (e.g. gender, age) to deepen the understanding of underlying mechanisms” which impact on access and usage. There is still a need for work that seeks to understand the way in which women make use of their mobile phones and the point to which mobile phones may be used for purposes of development and growth. In this perspective it is important to understand the opportunity for social and economic inclusion for women in small businesses in the informal sector through use of mobile phones. The focus of this research thus aims to understand the context of use of mobile phones by women that would also provide an explanation for the perceived limit in use.

In order to assess whether the use of mobile technology by women in South Africa enhances their businesses, this research builds on work that has been done by Research ICT Africa in assessing the use of use and access of mobile technology by women in Africa. As has been pointed out their work has focused on the gendered aspects on the use of ICTs including mobile technology. This study focuses specifically on mobile phone usage for women. I chose to focus on women alone as their experiences are important in the context of development. This focus allowed us to assess the experiences development and growth through use of mobile phones holistically. The study will go on further, to delve into what limits the use of mobile phones by women in the informal sector apart from education and income as identified by (Moyo and Deen-Swarrray, 2013; Deen-Swarrray et al, 2013 and Gillwald et al., 2010). This study aims to shed light on the way in which women make use of their mobile phones and the limitations they face in the context of development and growth. A qualitative study would contribute to the literature on understanding the gains and constraints to the inclusion of women in ICTs from the perspectives of women and their experiences.

2.5.1 Conceptual framework: Key concepts

This study aims to assess development and growth taking place for individual women in the lower income bracket operating business in the informal sector. Development is understood in this research as a people-centred approach that looks at human wellbeing. Development and growth lead to a use of economic and social structures that are there in ways that can play a role in individual wellbeing (Coetzee, 2001). This understanding of development has also influenced the methodology of the study as it places emphasis on the individuals meaning of social reality, their subjective reality within their specific circumstances to illustrate their experience of development and growth. The enhancement of women and their business in the context of growth and development refers to the process of inclusion.

The concept of inclusion is understood in relation to exclusion. Social exclusion encompasses the idea that people or groups of people such as women are unable to participate in the economic, social and cultural life of the community they live. This could be attributed to a range of factors such as income, education and cultural practices that create barriers to full or effective participation in society (Noya and Clarence, 2008; Allman, 2013). One can argue that women operating their businesses in the informal sector because they have no other choice are doing so from a point of exclusion. In looking at ICT access and use, exclusion discourse in ICT has mainly focused on social inequalities of those who have and do not have, referred to as the digital divide (Sorenson, 2002; Warschauer, 2003). The digital divide perspective often assumes that in order to bridge the gap, to allow for inclusion, there needs to be a provision of the necessary technological skills to include those without access. Yet as Norris (2001 cited in Sorenson, 2002) points out, the problem of inclusion is found in a wider social structure, which shape participation in the information society. In considering inclusion for women, it is not focused on getting them to be part of the information society but how they can make use of ICT tools to work for them in their daily activities (Sorenson, 2002). Inclusion goes beyond issues of access and highlights the interplay between gender and ICTs as gender identities and practices may need to be modified in order to achieve beneficial inclusion (Sorenson, 2002).

Development and growth focusing on the individual will be assessed in terms of social inclusion and inclusive growth. The understanding of social inclusion and growth are taken from

Warschauer (2003) and Heintz (2012). Social inclusion is understood as key in the developmental aspect of this study as it is perceived as the point to which individuals, families, and communities are involved in society and are able to influence their destiny (Warschauer, 2003). This looks at the way in which women move from exclusion to inclusion to allow for effective participation in society. Referring to social inclusion and ICTs in the informal sector, the concept is important in assessing how and why access could be seen to be significant and what it means to the individuals to have access to mobile phones leading to social inclusion. Inclusive growth is defined as “growth that takes place in a context in which economic opportunities (including employment opportunities) expand, the poor's access to these opportunities improves, and inequalities are reduced” (Heintz, 2012: 1). Inclusive growth is a path of development that seeks to ensure opportunities for all sections of the population, with a focus on the poor in particular women and young people (Kabeer, 2012). Growth is not just in terms of increased choices in economic opportunities but the quality of choices as well (Heintz, 2012).

The conceptual framework will be used as a lens through which the data will be analysed to assess how mobile phones are used to contribute to the improved quality of life and business for women. Four resources are identified as crucial for the promotion of social inclusion and growth that would enhance the political, economic and social power of individuals. These resources are physical resources, digital resources, human resources and social resources. Physical resources are linked to access to ICTs, in this instance the mobile phone. The digital resource refers to information available online, in this instance information derived from the mobile phone. Human resources refer to the abilities required to use the mobile phone. Social resources refer to the social structures that support the use of resources. The underpinning of social resources is rooted in the theory of social capital based on social relations and trust (Warschauer, 2003). These four categories provide a point of analysis to assess social inclusion and inclusive growth.

The final key concept is that of the mobile phone. In this context the mobile phone is a device used in varying ways by individuals that may lead to social inclusion and inclusive growth. The mobile phone is seen as the primary means of communication for the lower income women. Mobile phones vary in the functions that they are able to carry out, which would determine the extent of use. There are three types of phones that were defined as mobile phones, the basic phone, feature phones and smart phones. Basic phones are the standard phones offering standard forms of communication such as short message service (SMS) and instant messages (World Bank, 2012). Feature phones or Internet-enabled handsets were the second generation of phones introduced, which were able to send picture messages and often came with an inbuilt camera. Smart phones appear as an advancement of feature phones with a wider range of capabilities, with global positioning system embedded (GPS). Smart phones that have Internet access are able to download “apps” which can carry out other desired functions (World Bank, 2012). The table below provides a partial summary of mobile devices and their capabilities.

Table 3 Mobile devices and their Capabilities.

Device	Basic phone	Feature Phone	Smart Phone
Capabilities	Network Services including:	As basic mobile phone plus:	As feature phone plus:
	Voice Telephony and Voice mail	Multimedia Messaging Service (MMS)	Video Camera
	SMS	Still Picture Camera	Web browser
	USSD (unstructured supplementary service data)	Mp3 music player	GPS (global positioning system)
	SMS-Based services, such as mobile money	2.5G data access	3G+ Internet access
	USSD services, such as instant		Mobile operating platform (such

	messaging		as iOS,Android)
			Ability to download and manage applications
			VOIP (Voice over Internet Protocol)

Source: World Bank, 2012: 15. Adapted from Information and Communications for Development 2012 report.

3 Methodology

3.1 Introduction

This chapter outlines the methodological basis of the research using the qualitative approach. As the conceptual framework of the study focuses on micro-studies of development, qualitative methodology and methods were useful to gain perspective on the experiences of women using mobile phones in their informal businesses. I will discuss the actual methods used in the research, which cover the process of sampling and selection of participants, research tools and challenges during the fieldwork. The limitations of the research and ethical issues that were considered are discussed in the closing section of this chapter.

3.2 Qualitative study.

A qualitative methodology was applied to this inquiry, as the purpose was to seek an understanding of individual experiences of the use of mobile technology in the informal sector by women. A major characteristic of qualitative study according to Punch (2005: 158), is that it is “naturalistic, preferring to study people, things and events in their natural settings.” It is an attempt to understand or interpret phenomena according to the meaning people bring to them (Denzin and Lincoln, 2000). A meaningful understanding and description (Verstehen), is defined as the primary goal of such a study (Babbie and Mouton, 2001). Qualitative work moves from the quantitative aspect of social research whereby, findings are arrived at through statistical procedures or other ways of quantification (Hoepfl, 1997). Qualitative work involves the use and collection of a variety of empirical material that give description to individual experiences (Denzin and Lincoln, 2000).

The qualitative method of inquiry is useful for this study because of its ontological, epistemological and methodological assumption. By ontology I mean the nature of reality, epistemology is the relationship between the enquirer and the known and methodology is the way in which we gain knowledge from the social world (Denzin and Lincoln, 2000). The ontological assumptions of qualitative research are that research is done in a non-statistical, non-quantifiable and non-abstract nature of social enquiry, a contrast to the positivist form of enquiry. It implies that reality is constructed and interpreted by social actors and can be known

through interaction with these actors (Schwandt, 1998). The epistemological assumption of conducting a qualitative study means there is some form of relationship with the participants (Creswell, 2007). In practice, research is carried out in the field where the participants live and work, providing a context for what the participants are saying. In order to gain a description and understanding of the process it is an idiographic form of research. The researcher is seen as the main instrument in this research. The researcher is able to probe the complexities that are embedded in the meanings people give to their social reality (Babbie and Mouton, 2001).

Interpretivist epistemology

Qualitative study obliges us to interpret the data that we gather from the in depth description provided by respondents from their perspective. As an interpretivist study, it seeks to understand a particular social action by grasping the meanings that make up that action (Schwandt, 2000). Interpretive positions provide a perspective on all aspects of qualitative research project (Creswell, 2007). The true meaning of understanding come from seeking a viewpoint presented as a whole and in the parts it relates to (Neuman, 2006). The interpretive approach is concerned with the way in which ordinary people manage their everyday lives, the socially meaningful action of people from their own perspectives. The reality that interpretive researchers seek to understand is reality based on people's definitions of it. The interpretive approach is summarised by Neuman (2006: 88), as the basis of social science research that is "the systematic analysis of socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at understandings and interpretations of how people create and maintain their social worlds."

The problems and the research questions explored seek to understand particular issues and topics. The methods of research are located within the interpretivist stance. As will be highlighted in the methodology section, the interpretivist approach makes use of participant observation and field research in techniques of data collection (Neuman, 2006). Interpretive researchers engage in active analysis of transcripts in order to find verbal and non-verbally communicated understanding of the context as well as study video and pictures to see if any

non-verbally communicated meaning can be gathered. During the data collection process the researcher must respect the participants and the research location. Researchers need to be aware of power imbalances during the process of research and be sensitive to these. Individual differences need to be respected rather than grouping individuals into categories. The ethical practices of the researcher acknowledge the importance of subjectivity from their own perspective and be aware of the powerful position they have in research (Creswell, 2007).

3.3 Research Design

The research design situates researchers in the empirical world and connects them to specific sights, persons, groups, institutions and bodies relevant to interpretive material, including documents and archives (Denzin and Lincoln, 2000). This research focused on the use of mobile phones by South African women who had small to micro businesses in the informal sector. In order to understand the use of mobile phones in the social context of women and contribution to inclusive growth and social inclusion, observation of women in their workplace and semi structured interviews were the selected choice of method. Making use of more than one method, contributed to the data gathering by adding on to the findings on the phenomena being studied. Use of more than one method is as useful so as to see if there is a link with what is being said, thus increasing validity of findings (Kopinak, 1999 in Meijer et al 2002: 146). The following section will outline the method of participant selection, tools used for data collection, data analysis and ethical issues dealt with. In carrying out qualitative research, a practical approach includes considering the site; deciding on respondents, issue of access, positioning oneself, recording observation and conducting the interviews (Marvasti, 2004).

Selection of participants

Sampling is an important aspect of a qualitative research project (Punch, 2005). Qualitative sampling uses a deliberate selection method known as purposive sampling. This means sampling is carried out in a specific way with a particular focus in mind. In order to maintain validity of the research project it is important to ensure that the sample fit in with the purpose and research questions of the study (Punch, 2005). The focus of the study, as specified in the

topic was on women who had businesses defined as informal. Firstly we had to determine the research site, which is where the informal businesses were located and where I could gain access. Informal businesses are located in different areas of Cape Town. I chose to conduct interviews in townships, as this was where I had contact to South African women in informal businesses. An initial contact visit was organized to find respondents and familiarize them with the purpose of the research. Selecting to interview women from specific townships influenced the sample to contain only black South African women.

In selecting my respondents, the first issue I had to deal with was gaining access given that I was interviewing South African women from the position of being a non-south African, unable to speak their first language and not a member of the community. In order to have the initial contact, taking from the ethnographic approach, an informant was identified who would assist with gaining access and navigating the field (Marvasti, 2004). The informant was chosen on the basis of that they were a member of the community and could communicate in Xhosa and translate English to Xhosa and vice versa. By having someone immersed in the local community in the field, it would help with establishing rapport with the respondents. Marvasti (2004) points out the importance of establishing rapport as a way of gaining data from respondents. Babbie and Mouton, (2001) reaffirm the importance of rapport in preparation for the field when you establish yourself as a researcher to the respondents. With the help of the research assistants, we selected the key respondents who matched with the study and carried out interviews and observations.

In my selection process, I created a selection matrix that had a list of traits of the individuals I intended on interviewing based on the research question. The respondent matrix initially was designed with four respondents in mind. It sought to have two of the following: young and old, married and unmarried in different industries. The respondents had to be South African and made use of mobile phones and working in various sectors. To further create a mix of respondents I chose to interview black women from two townships in Cape Town. However on actual contact with the willing respondents, 5 respondents agreed to be interviewed and

observed. The respondent sample ended up being made up of one woman with a stay-in partner and the rest were not in partnerships or married. The respondents were based in three different industries, which is hair dressing, meat selling and a shebeen owner. Two respondents identified their business as hair dressing but carried out specialized areas of hair dressing and two respondents were meat sellers in a partnership. The profile of respondents in table 4 is in more detail. Rubin and Rubin (2005) point out the importance of dissimilarity in research in seeing if the findings are similar for individuals who might be in a similar field but in varying settings. One finds that there is value in actually having similar findings from individuals with diverse backgrounds.

The sample size is also an important aspect. The general guideline, according to Creswell (2007), is that we should not only have a limited sample size but also collect extensive detail about the individuals being studied. Qualitative research does not limit the size of the sample; however, in this case given that we were carrying out depth interviews and observations.

Table 4: Profile of respondents

Name	Education level	Age	Industry	Relationship status
Thandeka	Matric	30	Hairdresser-cornrows	Partnership
Zandi	Matric	24	Hairdresser-weaves	Single
Kgomotso	Standard 7	36	Meat seller 1	Single
Sasa	Matric	29	Meat seller	Single
Nina	Standard 9	39	Shebeen owner	Single

3.4 Field work

This section discusses the expected approach to the field and how the field was eventually carried out.

Data collection

The method for data collection was designed to facilitate the gathering of peoples' experiences of the social world. Good qualitative data gathered in the field comprises what the researcher experiences and remembers, field notes and interviews, which all make up material to be analysed (Neuman, 2006). A researcher pays attention to non-verbal detail, listens and makes notes. A field researcher observes people and their actions. A researcher listens to what is said and how it is said. Notes are made either during the interview or after the interview. These notes are made from the researcher's memory detailing what has been observed and factual information such as date, place and characteristics of respondent (Neuman, 2006).

In the field, the interviews were video and audio recorded. The audio recording was an option provided for respondents who felt uncomfortable being on camera. The observations were carried out with photographs taken of the business and surrounding areas. As the interviews were carried out by the research assistants, I was a silent observer most of the interviews. I would only raise questions at the end of the interview if I had come up with an extra question or if the research assistants had missed a point. Notes were made after each interview to detail observations that were made and areas that stuck out.

Interviews are described by Punch (2005) as an instrumental way to learn about the way people perceive, attribute meaning and define certain phenomena and construct reality. Interviews involve asking question on particular issues, listening to the responses, showing interest and recording the conversations (Neuman, 2006). As this research is based on the interpretive science, the qualitative interview seeks to gain responses that cover the respondent's world views, work and experiences (Rubin and Rubin, 1995). Certain aspects of the feminist research

also influences the process of interviews in that the interview should be a way in which the respondent is given a voice, without dominating the interview. Feminists argue for less definitive structure in approaching interviews. The researcher also must be aware of their reactions and emotions in the interview process (Rubin and Rubin, 1995).

The method of interviews was semi structured interviews because as argued by Muller and Glassner (2004), they are particularly advantageous when collecting data for an extremely thorough examination of the social world. The interviews make it possible for the researcher to gather participant's experiences and their meanings of social reality. Interviews make it possible to inquire into elements of the social world through talk and develop knowledge through what people say (Mason, 2002). Interviews were also used because it would have been difficult to organize respondents with different time schedules to sit for a focus group. Focus were also not appropriate given observations were also being done. Qualitative individual interviews were preferred from a focus group setting because the unit of analysis was the individual who would provide their own experiences as data for the research.

Interviews were conducted as face-to-face conversations at the business locations of respondents. The intensity of depth interviews requires a physical meeting which is necessarily flexible, interactive and generative, with meaning and language explored in depth (Ritchie and Lewis, 2003). One of the issues that would have created a stumbling block was language. To address this, as pointed out earlier, I had research assistants who had been briefed on the topic and given a set of questions carry out the interview. Thus the interviews were conducted fully in Xhosa and were transcribed to English by the research assistants.

Given that research assistants were conducting the interviews, there were semi- structured questions designed to guide the areas of questioning in the interview process. As Wengraf (2001) points out an interview schedule provides a set of guidelines or issues to be addressed in order to answer the research problem. The interview schedule was designed to work in accordance with the research question and the mini research questions. The schedule was

constructed in a four part way. The first section covered the business questions that focused on the history of the business, how it is run and its purpose in the lives of these women. The second section covered the use of technology in the business, with questions specifically focusing on how mobile phones are integrated into the business. The third section assesses the impact of business and incorporation of mobile technology on the business. The last section entailed demographic questions focusing on their age, employment history and education qualification. The questions were open ended in order to gain detailed information. Probes were frequently used as they allowed for further detail and clarity on what is being said (Neuman, 2006).

Analysis.

The analysis of the transcripts aimed to gain an overall understanding of the phenomena at hand. The analysis started with an open approach to the transcripts in order to pick up on similar findings for the respondents. This enabled a familiarization with the transcripts before I moved on to coding. I chose to make use of the Miles and Huberman approach of qualitative data analysis. The process of this analysis consists of data reduction, display of data and the final conclusion (Fielding and Lee, 1998). Data is reduced in the form of summaries annotated as codes and memos. Data reduction is purposeful in reducing data in a way that it allows for focus on particular segments of the data. Coding is an important aspect of data reduction that makes it possible to draw conclusions from the data (Fielding and Lee, 1998). The coding process in this approach consists of two levels of codes; descriptive codes and inferential codes (Punch, 2005). The approach points out that the labels we begin with are maybe descriptive only and help the researcher to get the analysis started and get a feel of the data. The descriptive codes help summarize the initial understanding of the data. It provides the basis for higher levels of coding. The second level of coding is the inferential level where patterns of smaller things are pulled together to form a more meaningful code (Punch, 2005). In this research example of first level codes were lack of job opportunities and frustration with previous jobs. These were then coded to the second level of inferential code reasons for going

into business. The codes are attached as appendix 2. The final conclusion of the data was reached through the use of the four resources that enable social and economic inclusion.

3.5 Ethical considerations

Ethics in research are principles based on morals and rules that guide us in our research. The key principles that concern the issue of ethics in my research project are that of confidentiality, anonymity and voluntary participation. It is important to remain honest with respondents, stating the purpose of the research, a requirement for a master's course. Informed consent will be necessary hence letters of access signed by the actual participants. In the actual field, before the interviews began, the research assistants explained issues of confidentiality, anonymity and basis of voluntarism to the respondents before the interviews began. The letters of access stipulated also highlight the confidentiality clause, anonymity as well as the purely voluntary nature of this project.

Confidentiality.

In terms of confidentiality, it was important to inform participants on who has access to the transcripts and recordings as the information was to be given in confidentiality. Given that the research assistants were the main interviewers and I would be observing the research, it was crucial to highlight that the confidentiality clause also covered the assistants. The confidentiality issues were explained before the interview began to ease the co-respondent anxieties.

Anonymity.

The research assistant and I knew the respondents names but they were asked if they would like to remain anonymous or have their names used in the study. Participants chose to remain anonymous in order to protect their identity. Aliases were used for the purposes of reporting back the findings. The identity of respondents in relation to information shared will remain only

known by myself. Respondents were informed on initial contact that their names or specific locations of their businesses would not be mentioned in the research.

Voluntary Participation.

The base of access was to approach community members that were known to some extent to the research assistants, it was important that every single participant in the research is a willing volunteer. Another ethical issue regarding participation would also be that some individuals might withdraw their participation or choose not to have the information they have given used in this research. Given that all participation is voluntary, it would be unethical for me to badger them into continuing this research, but rather thank them for their time. It was also explained to the respondents that there was no wrong or right response for the interview process. The participants were given mobile credit as a thank you for their participation. They were only told about the mobile credit being given after they had indicated that they would be willing to participate in the interview. They were unaware of how much mobile credit they were receiving.

4 Findings

4.1 Context of respondents

The first section of the findings provides an overview of the five respondents that were interviewed and observed. These women were located in three different townships and were running micro-businesses in these communities. Two of the respondents were running the businesses from their place of accommodation. The first hairdresser was running her business from a shack, whilst the shebeen owner was running her business from her RDP house. The remaining three respondents had designated locations for their work. The two meat sellers were located in a section of the community zoned for cooked meat selling by the council, together with other meat sellers. The second hairdresser had a structure that was located a few meters away from the RDP house that she stayed in with her family. The age range of the respondents was from 24 to 39 years old. All of the respondents were on the MTN network.

Respondent 1: Thandeka*³ hair dresser with plaits



Figure 2: location of business and residence.(taken by researcher)

Respondent 1 Thandeka resides in Philippi. She is 30 years old and has an education level up to matric. She moved to Cape Town from the Eastern Cape three years ago and started staying in Philippi. At the time of the interview, her live in situation was with her partner and child. She

³ -given aliases for respondents

has one other child in the Eastern Cape. Her partner bought her the shack that she stays in. The shack has two rooms-a sleep areas and the kitchen which doubles as the place of business. The business was started one and a half years ago and she specializes in plaiting people's hair- '*amaflerhor*'. It is located close to the main road with a visible sign above the premises. Her clients are mainly school children as well as some adults. She is the owner as well as the hairdresser; no one else works with her. The money that she makes from her business is used in the upkeep of her family in Cape Town and the child in Eastern Cape. At the time of the interview, she owned a Nokia basic phone.

Respondent two: Nina*-Shebeen owner

Nina, the shebeen owner resides in Ekuphumleni in her RDP house. She is 39 years old and has stayed in Cape Town most of her life. She was born in Cape Town, moved to Eastern Cape and came back to Cape Town at the age of ten and has been residing here since then. Her mother and sister stay in another neighborhood close to Ekuphumleni. She is single and did not mention children. She resides with one other tenant and runs the shebeen from her house. Her line of work is selling alcohol and according to her, it is the only shebeen in the Ekuphumleni. Her level of education is standard 9. She used to be employed as sweeper but she quit the job to start her own business. The business has been running for four years and she sells alcohol only. Her clients are the local community members and foreigners who reside in the community. Her earnings have been used for her upkeep and taking care of her father. She has a Nokia X2 feature phone.

Respondent 3: Sasa* Meat Seller

Sasa is 29 years old and co-runs her mother's meat selling business. She was born in Gauteng and moved to Greenpoint, Khayelitsha where she currently resides, in 1998. She stays with her mother, siblings and her daughter. She was single at the time of the interview. She studied up until matric and took a short paramedics course but quit to help her mother with the meat selling business. The business is located at a site commissioned by the city council. She owns a Nokia X2 feature phone and makes use of her sister's phone as well.

Respondent 4-Kgomotso* Meat seller

Kgomotso is 36 years old and together with Sasa, co-runs the meat selling business. She is from the Eastern Cape but moved to Cape Town at a young age. She completed grade 9 and has a qualification in making belts and shoes. This skill was gained from an initiative to help disabled people, and she had access to it as she was disabled. She stays in KhayelitshaTown2, which is also close to the meat-selling place. Her relationship status at the time of the interview was not married and did not indicate to having a child. She joined the meat selling business in 2008 and has been employed there ever since. The phone she has is a Nokia basic phone.



Figure 3: Meat selling place where Kgomotso and Sasa Work. (Taken by researcher).

Respondent 5:Zandi* Hairdresser

Zandi is 24 years old and stays in Khayelitsha. She specializes in putting on weaves for women. She studied until matric and used to work with a family member as a hairdresser. She has an informal infrastructure that is located behind an acquaintance's house where she carries out her business. This place was set up to cater for a growing customer base. She stays with her family. She employed her sister to work with her in the business. She moved to Eastern Cape

when she was 12 to stay with her parents and 7 other siblings. She owns a Samsung chat, a feature phone but uses her younger sister's smart phone, a Blackberry.

Having pointed out a background of each of the respondents, I shall now go on to present the findings put together through the process of coding.

4.2 Reasons for getting into business:

In order to understand the move to micro-enterprises in the informal sector, I looked at the reasons why the women chose to go into business. The overall indication was that there were no other jobs available and going into business was a better option. Business as a better alternative to being employed by someone was a resonating theme for all the respondents. Thandeka indicated that there were no jobs and she started plaiting. Nina had a job as street sweeper but expressed frustration at the pay structure and that at times they were not paid. She decided to rather go into business as way of ensuring steady income. Having a business is highlighted as an intrinsic fulfilling moment by Nina who pointed out that she now went to bed full and never had to ask for food from her neighbours. This was the similar case with Zandi who pointed out that used to work for another hairdresser but was frustrated with the pay and left to start her own business. For Kgomotso and Sasa, both were previously unemployed and they were called on to work for the owner of the meat selling business. Sasa took over from her mother who was ill whilst Kgomotso was told she could become part of the meat selling business after Sasa's mother noticed that she did not have a job. Sasa specified that for them, the meat selling business was established because her mother "heard that in Cape Town a way to live is 'Vukuzenzele' (wake up and do it for yourself)" (Sasa, 2013).

4.3 Reasons for particular line of business

Having established the reasons why women moved into micro-business in the informal sector, the second area of interest that came up in the findings was why women moved into a particular line of business. Looking at the meat sellers, the move into business was based on an invitation or responsibility to become part of the business. As Kgomotso points out, she had been a patron at the meat-selling centre and realized she could do this job. She was asked

come to do the job “I started with Mam’Skaale. She used to see me around and noticed I was not working and started with her” (Kgomotso, 2013). Whilst for Sasa it was a matter of joining the family business that had already been set up. She took over her mother.

Moving into a particular line of business was based on the skills they had and realized could generate an income form. When it came to Thandeka, she moved into a particular line of a business as a result of a snowball effect. She plaited a family member and found people were interested in getting their hair done. In the case of Zandi, her specialization was being able to put on hairpieces and chose to base her business on that speciality. Whilst for Nina, she selected particular line of business where she was likely to make a profit based on her studies. She had acquired business knowledge in high school and figured she could get into business. She chose to sell alcohol as she realized that she would be offering a service “first of all, there were no shebeens here in Ekuphumleni. I own the first shebeen” (Nina, 2013). From her calculations of how much she could make a crate that’s where she decided to sell alcohol.

The skill that was needed for all these women to get into this particular line of business was easily gained, outside of the formal structure. Thandeka knew how to plait; Sasa and Kgomotso were taught on the job the skill of braaing meat. In the case of Nina, she applied the educational knowledge on profit and gain in running her business.

4.4 Management of business:

The respondents were asked how they run their business and it was found that the women ran their business in their own particular ways. All the respondents indicated that there was no form of record keeping taking place. When Thandeka was asked if she keeps a record of her clients she indicated that she does not but she knows that there are regulars that come every month. Nina pointed out the she used to keep records in the summer but then stopped. Zandi also alluded to the fact that there are no records kept. The meat sellers did not have any form of official record keeping.

In terms of managing finances, stokvels and bank accounts were seen as a way of managing finances. Whilst at the same time petty cash was kept on site as Kgomotso was observed taking money from underneath her bed. Three of the respondents indicated that they put aside their

money in a savings stokvel. In response to the question of whether they had bank and a way of saving their money, Sasa (2013) responded by saying:

"We do not have that. We save our money ourselves. We have also joined imigalelo (stokvels or saving schemes in community)...that's how we save. Because we don't have banks"

Nina also revealed that she keeps part of her money in a stokvel. Two of the respondents did make use of bank accounts. Nina indicated that she had two bank accounts, one with Capitec for her profits and the other with standard bank for the stokvel. Thandeka kept her money in her partner's bank account because she had lost her identity document and was unable to have her own bank account. Zandi did not mention any form of saving money and pointed out that she actually keeps the money she makes with her.

With regards to the decision making process, the extent of decision making ranged from complete to limited autonomy. Nina and Zandi had complete autonomy on decisions that had to do with their business. Thandeka had decision making autonomy in regards to the clients and sourcing of suppliers but in terms of how she managed her finances she made decisions in consultation with her partner. Kgomotso and Sasa are co-managers of the business but the original owner of the business, Sasa's mother seems to still have an overall say on the running of the business. As Kgomotso (2013) indicates "there is only one owner...She will come when there's a problem you see, when there's a dispute with a customer, then she will come". They still have decision-making autonomy as the owner is not always on site at the business.

The money made was put back into the business to for purchase of supplies. Supplies also included airtime. Sasa indicated that she uses an average of ZAR150 to 200 worth of airtime, money that she gets back at the end of the day. Furthermore, with the meat sellers, each individual was responsible for the purchase of their airtime. The profit made from the business went to the upkeep of these women. Kgomotso, for example used her profit for the upkeep of her family in the Eastern Cape, as she was the only breadwinner with eight dependent relying on her income. Whilst Zandi said that she used her finances at home for her own personal issues. In the case of Nina she managed to build herself a house in the Eastern Cape.

4.5 Relation with customers

Given that the micro businesses were providing a service, I identified the broad theme of communication with customers. The first area that required communication was that of 'the walk in' customer. This was dominant in three of the interviews. Thandeka pointed out that sometimes her clients just come in, with no prior communication. The sign she had set up indicated that, individuals could simply walk in and inquire. Whilst at the meat selling, the walk in customers actually had to be approached given that they had a variety of stands that they could go to. Kgomotso (2013) highlights this when she points out that:

"Yes so a customer will come, then you'll see that he is standing, then you approach the person. You then greet the customer; I have to be the first to greet. Then I'll say 'hello bhuti, are you all right? I sell red meat and pork..."

In all businesses there was a method of communication to the business owner or manager. In the case of Thandeka, the hairdresser, all her clients called her, potential and regulars, she did not call them. She pointed out that her number is distributed amongst the customers as one person passes on the number to someone else who might be interested in getting their hair done. "I give to the person I plait hair. Then they would give it to someone else. Then that person calls me up to set up an appointment you see?"(Thandeka, 2013). This was a similar finding with Zandi who pointed out that her clients could pass on her number to someone who sees the hairstyle they have and they would also like to get their hair done. Furthermore with Zandi, sometimes the client calls to inquire about the price. Thandeka highlighted that even though she has regulars who have to come in every month, she does not call them to follow up on their expected visits. . Kgomotso and Sasa indicated that with them customers call to make orders in advance to avoid the queues. At the same time a customer can come in physically and order and then call to pick up their order. Sasa indicated that a customer can call in advance and she can drop the order for them if their house is close by to them. Customers also send 'please call me's' to Kgomotso who indicated that she has to call back every number that send a please-call-me as it might be a client. Nina's clients communicate with her via social media, a point discussed further in the section covering phone use.

The business owners also communicate with the customers via their phones, with the exception of Thandeka. In the case of Nina, her communication with customers is based on her calling in credit extended. She points out that she offers her clients credit if they need to buy alcohol but do not have money:

“It has helped me a lot. Cause I can call the customers who owe me. I don’t have to be going house to house to collect my money. I just buy airtime and when I call them they know” (Nina, 2013).

Kgomotso and Sasa also indicated that in communication with customers, they send bulk SMS’ to the customers. These are meant to communicate to the regular customers when there is a special price for the days. Two of the businesses did not allow credit to customers but with the meat sellers and shebeen they allowed for credit. This was because customers at times would come without money but they knew that these customers would return the money. In the case of Nina she pointed out there are only certain customers who have a line of credit because others do not pay back. The meat sellers indicated that whilst sometimes they might make a loss from customers who do not pay back they felt it was important to maintain regular customers in that way.

We managed to observe customer interaction for four out of the five respondents on the interview days. Thandeka was the only respondent who did not have a client coming in during the time she allowed for the interview. The relation with the customers observed was more along the level of friendly interaction. The hairdresser’s clients pointed out that other clients had referred them to her. In the shebeen with Nina, there was a constant influx of clients, and she pointed out some of the regulars that had also been seen on the first initial contact visit. In the case of the meat sellers, the days of the interviews had a few clients but they seemed to know each other well. We did not observe customers identified as new customers coming in to any of the businesses.

4.6 Relationship with suppliers

In regards to business practices, the relationship with suppliers was taken into account. Firstly when it came to sourcing supplies, all of the respondents had a regular supplier from whom

they bought. All of the respondents were sourcing only one type of product and sourced from the most convenient supplier. Thandeka pointed out that she bought her supplies, which was wool for the plaiting from a local super market. This was the only place where she bought her supplies. In Zandi's line of business, the customer either came with their own hairpiece or she sourced from her one supplier based in Johannesburg. The other three respondents had sourced from two different suppliers. The meat sellers bought their meat from a butchery that was within their place of residence and another one located in Mitchell's plain. Nina had two suppliers, local shop owners where she bought her alcohol. She highlighted that she has two suppliers for the reason that she can buy alcohol from one after the official trading hours:

"With O I can call him before I go. Especially when it's late. Cause he does not sell cases after 7pm. So what happens is that after 7pm and I have run out, I can call him for a favour and tell him that there are people who are coming to get a case. But with Daki I cannot do that" (Nina, 2013).

The payment system for all of the respondents was indicated to be on a cash basis. There was no line of credit extended to the respondents by their suppliers. The entire respondent sample indicated that they had to go and physically pick up their supplies. With Nina, she indicated sending people to pick up the crates, as the suppliers were located within close proximity. Zandi has to fly to Johannesburg to pick up the hairpieces.

In terms of communication with suppliers, Nina, Kgomotso, Sasa and Zandi indicated that they actually have a line of communication with suppliers that involve calling them. In the case of Nina she calls one of her suppliers in advance in order to get a favour of buying crates after 7. Kgomotso indicated that they call the butcher when there is an influx of customers so that they may be able to make an order for extra meat that they will go and pick up. Whilst Sasa pointed out that she also gives suppliers her number so that they may keep in touch with her in regards to deals or supplies that might have come in. Zandi has to call her supplier in advance to let them know she is coming out to get supplies and when she has arrived in Johannesburg. The refill of stock is based on a demand basis. With the meat sellers they have to sell enough for the

day, as there is no storage facility. Whilst with Nina, restocking is dependent on how much alcohol was consumed in the previous weekend.

4.7 Marketing

The question of how they acquire customers was posed to the respondents. Upon observation, only two of the micro-businesses had some form of sign indicating the place of work. Thandeka pointed out that she put up the sign the year that she started the business. In the case of the meat sellers, all of the vendors at the site have a sign to indicate each person's stall. In the case of the three other respondents, clients knew where they were located based on some form of customer and community network. There was no sign above Nina's house that there was a shebeen but the community members knew of it.

Verbal marketing was carried out explicitly by four of the respondents. As highlighted earlier in the section on communication with clients, Kgomotso indicated the need to approach customers. In the case of Nina, verbal marketing of the business took place in conversations in the community. She pointed out that mothers were worried about the safety of their children when they go drink in shebeens in other neighbourhoods. Her response would be that "they don't have to go far to get alcohol because there is now a shebeen in the neighborhood. My shebeen" (Nina, 2013). Referrals were another form of verbal marketing. In the case of the two hairdressers the referrals would occur after another person had seen the work they had done and would be referred to them. In this instance, clients were moving adverts.

Marketing via social media and instant messaging through Whatsapp⁴ was also an avenue through which they gained customers. The three respondents with Internet capable phones and used the Internet pointed out that they made use of Facebook and Whatsapp to advertise to clients and gain new customers. Zandi indicated that she could put up a photo of her work on her personal Facebook page and people will see from there. Those who are interested can get in touch with her as her number and BBM pin are on Facebook. Whilst Kgomotso, who did not have access to the Internet, indicated she knew about Facebook and Whatsapp and that it

⁴ Whatsapp-mobile application for instant messaging on internet enabled mobile phones

would have an impact on the business. Sasa (2013) indicated that if she could, she would have a Facebook page that “even people overseas could see”.

In dealing with new customers, there is an aspect of number distribution that was seen in the case of three respondents out of the five. In this instance Sasa (2013) indicated that when one comes across a potential customer, “they ask for your number you must give it”. Apart from customers asking for the number, the number is also distributed to the clients, in particular after they are pleased with the service. After noticing the trend of customers asking for the number Kgomoitso began giving clients the number and explained that it would be easier for them to order since it got busy at the place sometimes. In the case of Zandi, she revealed that she can come across a potential client, give them her number and they can communicate via Whatsapp.

4.8 Phone use in business

Mobile phones were used often in the business, as has already been indicated under the theme of communication with suppliers and customers. The main utilization of phones was voice calls and Internet use with a focus on social media and instant messaging. Voice calls went between customers and respondents. In the instance of the meat sellers, the phone was also used to communicate amongst themselves or with the owners. For example the Kgomoitso (2013) pointed out that she calls Sasa or the owner:

“If I do not feel well and I cannot come in. then I would call on them to explain. So that the person who you will be working with will know. So that the owner can help also”.

The meat sellers indirectly receive communication on anything happening at the site from the owner. In this instance one finds a committee that runs the site, calls up the owner if there is anything that they need to know and then the respondents are informed. Their phones were used in their personal and business capacity. None of the respondents had a phone reserved for business and one for personal use.

Internet utilization via their mobile phones was another area of use. The main use of the Internet was for social media and applications. Three out of the five owned or had access to Internet capable mobile phones. Those with Internet capable phones used Facebook and Whatsapp for advertising their business. Nina pointed out that the main things she uses her phone for were Facebook and Whatsapp. Sasa also indicated an active use of Facebook and Whatsapp. Whilst Nina accesses these sites directly from her phone, in the case of Sasa she used her sister's phone for the purpose of the business. Similar to Sasa, Zandi makes use of her sister's phone. On observation, the phones that they were using were blackberry that had an active blackberry Internet plan. In regards to Nina she could collect make inquiries on credit owing to her through Facebook and Whatsapp. Her Facebook wall is also a point of communication that her clients make use off. They communicate with her via her wall and write, "please open the shebeen, we are thirsty, we want alcohol" (Nina, 2013). Sasa and Zandi indicated a use of Face book and Whatsapp to get new customers for the business.

We also sub-coded how much a phone mattered to the respondent and why. All of the respondents indicated that their phones have really been useful in managing the business. In the case of Sasa and Kgomoitso expresses the advantages of the phone in that customers do not have to wait for orders and they stay in touch. Social media is seen as important in that it is cheap to use according to Sasa. Whilst Kgomoitso indicated that if she had Face book people would be able to get in touch with her at any time. Thandeka was the only respondent who did not refer to the potential role that social media might have in the way she runs her business.

4.9 Challenges

In being engaged in business, there were challenges that the respondents experienced in their line of work. Looking at the meat sellers, the owner of the stand still exerts some form of control of the business. They have to be alerted in the case of a dispute with a client or if someone is unable to come to work. An example of this is highlighted when Kgomoitso is asked whether they pick their own off days but she indicates that the owners decide that. Apart from challenges from the owner, they have to deal with the issue of crime. The site has mainly

women working there and upon observation, no form of security especially if one is trading after certain hours. The other challenge is that all the meat must be sold out, as one cannot keep the meat for the next day. In terms of airtime for the business, Sasa and Kgomotso buy airtime individually regardless of it being meant for the purpose of business. Challenges are also faced in dealing with the type of clientele that comes to the place of business. One finds unruly clients who might be difficult to confront:

"Sometimes there are drunken customers. And sometimes you end up losing your money. [Customers] say they have given me the money and I searched my pockets to show that they did not pay me. But I had to let them go because I was scared of them" (Kgomotso, 2013).

Problems with drunken clients also happen in Nina's line of business, as her customers are often drunk. She points out that she cannot deal with her customers when she is sober so she also drinks with them "I must also drink so that I can handle them. I drink but I do not get drunk" (Nina, 2013).

Another challenge faced by 3 of the respondents was that they were in a seasonal line of business. In the meat selling business and the shebeen, winter is an off peak period for clients. In the case of shebeen the stock in winter is reduced in comparison to summer "So I can sell 6 cases in one day...because it is summer. But in winter...I probably sold 2 cases a day" (Nina, 2013). Kgomotso pointed out that apart from low business in winter, the business also slows down when there is a soccer match and people will not come to the stands.

In terms of their cell phones, credit was an expense to Nina as she said she bought credit every day. For her credit is expensive because she buys it from a spaza at a marked up price "they charge R5.50 for R5 airtime and R11 for R10" (Nina, 2013). On this aspect of airtime, Sasa considers spending as much as R200 for cellphone credit is worth it as she says she gets her money back.

Sasa indicated that whilst they did want their business to grow, she found that not being able to sell alcohol at the meat-selling place as an obstacle to the growth of business. She noted that they would need a tavern where they can sell alcohol because alcoholics love meat.

Crime was a challenge for all of the respondents. As the businesses dealt with cash on site, four of the respondents raised a concern with being targeted by criminals. Zandi pointed out, that as a woman she was afraid that gangsters could come and steal her money at any time. In the case of Nina, she feared her clients could steal from her. Kgomotso pointed out that when other traders are gone they are vulnerable to being robbed by thieves.

5 Analysis

The overall aim of this project was to explore the way in which women have made use of mobile phones in their micro-enterprises based in the informal sector. The study focused on five black South African women in Cape Town townships in three different industries. On the whole women were using mobile phone in order to add to the quality of their lives and their business. The findings illustrate how they were using them and how this led to development and growth. To understand how the use translates into development and growth, the findings are assessed through the conceptual framework of social inclusion and inclusive growth. The identified resources of physical, digital, human and social resources are the lens through which we assess the contribution of mobile phones for purposes of social inclusion and growth. I begin by highlighting the social context of the women. The findings are then assessed on the basis of the four resources need for inclusion-physical, digital, human and social. The challenges that women face in the business and limitation of mobile phone use are reflected upon. The conclusion summarizes the overall project and provides an overview the significance of the project, limitations and areas of further research.

In answering the main research question on how women make use of mobile phones, what is drawn to my attention is the need to understand integration of technology into their lives within a specific context. When one assesses social inclusion, the role of technology can only be understood within the social context it is located. This brings to light the intertwining relationship between context and use (Warschauer, 2003). The women in this research were located in poor communities, with high criminal activity and with the income from the business being used to support immediate and extended family. The informal sector provided a way for inclusive growth in economic activities. Women were seen to move into micro-entrepreneurship due to the lack of other alternatives for income rather than as a choice. This is a similar finding as the gender and ICT study in Africa that found most women in South Africa enter the informal sector based on what was termed a push factor (Moyo and Deen-Swarrray,

2013). As the inclusive growth concept points out, participation in the informal economy by these women was where they could carry out business for their benefit where the formal sector failed to provide jobs they could partake in (Heintz, 2012). The women were engaged in livelihood enterprises with the main purpose being to provide a source of income to support themselves and their families (Duncombe and Heeks, 2008). These enterprises focused only one product in their business. Only one respondent indicated a desire to expand horizontally by diversifying products for sale. Thus one can see from this context that these women would benefit from any use of mobile phones to enhance the productivity of their business (Duncombe and Heeks, 2008). In terms of the skill set that women had for running the business, they had mainly gained the necessary skill set outside a formal education. All the women had not gone beyond matric education. The characteristics of the business assessed illustrated the key distinctive features of the informal sector that is low set up enterprise and small-scale operations with skills gained outside formal business (Verick, 2006). The use of mobile phones was as a tool that the women already possessed rather than a thought out strategy that would help the women and advance their businesses. Mobile phones were being used to make business more effective and efficient in the state that it was already in. The mobile phone was being adapted to suit the needs of the business as determined by the respondents. There was no distinction between personal and business phone use as the women used their personal phones for their business. This finding links with the survey done on ICT use by RIA in 2012, which showed that only 27.7 percent of mobile phone users make use of, a private mobile phone dedicated to business purposes (Gillwald et al., 2012).

Having highlighted the importance of context in the findings, one may go on to look at how the use of mobile phones contributed to development and growth impacting on women. Development for women was understood through the conceptual lens of social inclusion and inclusive growth. This framework allowed for an assessment on the use of mobile phones by women to improve on their business and overall their lives. The project was assessing how women, from a marginalized position, were making use of the functions of mobile phones to contribute to their inclusion socially and economically. Social inclusion was perceived as the

level of involvement of individuals in society and may influence their outcomes (Warschauer, 2003). Inclusive growth focused on the direct impact to the business of phone use. The data was analysed using the four resources identified as necessary for social inclusion and inclusive growth-physical resources, digital resources, human resources and social resources (Warschauer, 2003).

Physical Resources

Physical resources meant access to the actual ICT in question, which was the mobile phone. As was required in the respondent matrix all the respondents had to have mobile phones. Thus by having a mobile phone individuals were able to connect to the relevant parties key to their work. Emphasis was placed on the variation in the physical resources that also determined the function of their mobile phones. According to the conceptualization of mobile phones by the World Bank (2012) the respondents had basic phones and feature phones. One respondent had a feature phone but had access to a smart phone, a Blackberry, through her sibling. The type of phones individuals had, determined the functions they could apply for the purpose of their business. The respondents with the basic phones could only make use of voice calls, 'please call me's' and SMS for business. The individuals with feature phones were able to make use of the Internet through social media and instant messaging. This highlights the difference in the level of social inclusion in terms of physical resources that one has. Having the physical resource also depended on the ability to be able to communicate with the relevant people. Mobile phones could only be used where the supplier or customer also had the means of communication. The clientele and suppliers had cellphones thus allowing for interactive communication. Mobile phones helped in improving access to economic opportunities and improving the management of business in certain aspects (Heintz, 2012). The contributory aspect of mobile phones to inclusive growth was that it provided a way of increasing the customer base and maintaining regulars. Inclusion and growth was contributed to by mobile technology in the instance where it was possible due to the other relevant parties also having the physical resource. The physical resource of mobile phones was complimentary to already existent physical resources for business operation as all respondents had a physical location for their business. Therefore

social inclusion through mobile phone access meant women experienced different economic and social possibilities in spite of having access to a mobile phone.

Digital Resources

The second aspect of social inclusion looked at digital resources meaning the information derived from their mobile phones that would help the women and in their businesses. As Warschaeur (2003) highlights, information can be pushed through relevant Internet sites or text messages providing information benefiting the owners. ICTs can be used to provide and source information on prices of supplies, which would help in finding the ideal price for supplies. Being aware of other cheaper supply options for livelihood-oriented business is important in order to increase their personal financial gain in the end. They could also provide information that could inform better business practices thereby increasing the knowledge to help women in their business and in their daily lives. Knowledge could also be gained on financial services and financial options available from mobile phones (Duncombe and Heeks, 2008). In this research, the information exchanged was geared towards increased communication with customers and suppliers. Mobile phones were used to source supplies from regular suppliers but there was no indication that they communicated with other potential suppliers to find the best price. The limited use of digital resources was inclined towards managing already existent business practices. The women were not receiving or searching for information that would improve their skills base. Thus one could argue a limited gain from digital resources as defined by Warschauer (2003).

Table 5: Areas of information exchange between respondents with customers and suppliers.

Women communication with:	Customers	Suppliers
	Make and pick orders	Call for supplies
	Set an appointment	Receive promos
	Make an enquiry	
	Alert on arrival	
	Debt collection	
	Sent promotions	

However even though information was not being exchanged explicitly in line with the concept, women were also a source of information in their social context. The information they sent out was geared towards marketing and sourcing supplies. Table 5 shows areas of information exchange between the women and their suppliers and customers. Voice, social media and instant messaging were the major forms of mobile phone utilization in relation to customers whilst for suppliers it was mainly voice calls. The impact on the women to being able to communicate with customers resulted in a better management their personal time and cutting out on unnecessary travel. The use of bulk SMS sending promotional messages was distinct to only one enterprise. This was the only owner who indicated the desire to expand their business. This showed an innovative use for their business to ensure growth. Basic use of phones, that is voice and SMS were being used in conjunction with Internet capabilities to increase effectiveness and efficiency of the business. In this context social media and instant messaging provided a cheap way of constantly being in touch with customers and allowed for back and forth interaction. The way in which the mobile phone was used allowed for social inclusion and economic growth from information exchange.

Human Resources

Human resources referred to the ability to use mobile phones, and in this case all of the respondents were able to make use of mobile phones in ways they saw would benefit them in business. All of the respondents stated that the mobile phone mattered to them in the way they did business. Education plays a role in the extent to which individuals are able to effectively use their mobile phones. As pointed out in research on ICT use and gender, women with primary education have limited skills to fully utilize ICTs for their business (Moyo and Deen-Swarray, 2013). In the case of Internet utilization it was social media site face book and instant messaging through Whatsapp that were mainly used. As was seen in qualitative research on use of mobile phones by South African women, they were mainly interested in chatting via Whatsapp (Deen-Swarray *et al.*, 2013). In this case use for chatting was being turned into a way of advertising their business. Instant messaging platforms were being turned to, as they were cheaper and effective marketing platforms. One could also argue that, the aspects that were being used where the ones considered necessary for enhancing their business. Social media provides a form of communication that does not rely on already published content but rather makes it possible for people to share information that is relevant to them and to the community they are based (Stork et al., 2013). Having access to mobile social media works well in a context where people have a lower level of education, as there are lower ICT skills required (Stork et al., 2013). Thus owners were operating within their capabilities. One would need to question if the respondents actually had the skills and understanding of how they could benefit from other Internet sites, would they make use of them. The human resources that the individuals had, allowed for them to be able to make use of functions of basic and feature phones to the best of their knowledge.

Social resources

Finally we take into account social inclusion in terms of social resources based on aspects of social capital of social relations and trust. Social resources were present for these women to be

able to make use of their mobile phones in their business. The women were based in communities where there was a familiarity with customers and community members. The presence of social resources is further indicated by the use of stokvels by these women to save their money. Lines of communication between customers and the respondents were possible as a result of the social relations between the two. Having access to the customers meant a rapport being built, as they were able to communicate what they needed. Trust was demonstrated in the way in which customers could actually place orders through mobile phones and be rest assured they would find them ready. Trust was also maintained as a way of assuring regular customers given that credit was extended on a basis of trust. Whilst for the owner of the shebeen, social relations facilitated the possibility of being able to buy alcohol after the official selling time. In this instance social resources actually facilitate the way in which mobile phones were being used. A study by Molony in (2007) on ICT integration into business practices in Tanzania highlighted the importance of trust in enabling use of ICTs. Thus with the social resources necessary, social inclusion was taking place. The social resources improved on the productivity of the business, impacting on the possible outcomes for these women.

Development and growth through the conceptual framework of social inclusion and inclusive growth showed that use of mobile phones contributed positively to the lives of these women. The mobile phones were contributing to the already existent forms economic activity and social practices in place. Mobile use allowed for efficient organization of the business that would improve on the income thus increasing financial resources for the respondents. Growth has been taking place in terms of gaining the local market. Similar to the finding by Donner and Escobari (2010) mobile phones were leading to increased marketing and sales with the supplier and customer network in place. They were also being used to draw in new customers by utilizing social media. However the retention of these customers was not highlighted. The way in which the mobile phone was used to increase the efficiency of the business was seen in the way each and every one of these individuals was able to provide for their families. The income was mainly used to maintain the basic upkeep of family members. One respondent even went on to build a house for herself in the Eastern Cape from sales from the business. Consequently

the gains from the increase in efficiency business that increased economic opportunities allowed for a reduction of poverty. However with no records of the business, there was no tangible measure to indicate whether customer numbers had risen significantly when the respondents incorporated mobile phones into their business. Thus we cannot assume a causality relationship when women use mobile phones that lead to an increase in income but rather it is an enabling mechanism for social inclusion and inclusive growth.

Challenges and Limitations

There are challenges and limitations that impact on the potential for development and growth in this study. Limitation on the use of mobile phones for purpose of inclusive growth is seen with regards to cost of the prepaid market. All of the respondents were on the MTN prepaid plan that is not the cheapest tariff plan (Gillwald et al., 2012). Thus they were not running on a cost saving network. In some circumstances it is for Internet use but not converted into data bundles. They were using out of bundle rates that are not as cheap in comparison to data bundles. The example of one respondent buying credit at above the sale price highlights irregularities around the pricing of airtime from the retailers. Education and income were the identified limitations to the use of mobile technology in previous studies (Gillwald *et al.*, 2010; Deen-Swarrray *et al.*, 2012; Moyo and Deen-Swarrray, 2013). The education level of the respondents limited the extent to which they were able to use their mobile phone. The knowledge that they had on utilizing the Internet to their benefit extended as far as their capabilities. Women were using a large sum of their income for their business but the inclination was that it was worth it in the long run. Given the importance of gaining customers, there were no indicated initiative to find another platform of marketing their business online other than Facebook and Whatsapp. Mobile phone use impacts on the efficiency and effectiveness of managing micro-enterprises however there were challenges that the respondents faced in their individual capacity that go beyond functions of mobile phones.

The limitation of mobile phone use to impact on growth and development may be attributed to external factors beyond its function. In spite of mobile phones being used as a tool of marketing to attract new customers and retain the regulars, the seasonality of the line of business that these women are in attributes to the irregular clientele. As a result, their line of business curbs the influence on their outcomes and access to economic resources. Their work is solely dependent on the customer's ability to make use of the service they provide. Even though the hairdressers could be mobile, the indication is that customers come to them, which is what they prefer. Therefore one can see that the mobile phone expands customer base but in times such as winter, the business slows down there by limiting the income of these women. Furthermore this stresses the problems of focusing on one aspect of business in these livelihood enterprises. Relying on one aspect has an impact on the overall income that one receives and how it then translates to limit their overall benefit and for their dependants.

The women also faced challenges of crime as they were located in areas of high criminal activity. Their business was cash based and there were no forms of security in place. There are no safe keeping facilities in the places where women practice their business hence they become targets for robbery. Cashless transactions through banking facilities are not used in the daily activities of the business. The two respondents who make use of the banking system do not bank regularly or use other banking services in their daily run of their business. Financial loss is also attributed to clients who at times do not pay back their line of credit. A suggestion would be the use of mobile money transfers in business transaction but this was a concept women did not put into practice for the purpose of the business. The option of mobile money is a concept unfamiliar to the respondents. Mobile money can provide a solution but the main concern would be to provide a sustainable security alternative Women did not use their phones to contact others when in danger or when there was a security concern.

Limited use of mobile technology has been linked to education and income in previous research as well as gender based social and cultural nuances (Buskens and Webb, 2009; Gillwald et al., 2010; and UNCTAD, 2011). In this study, we did not find an inclination towards cultural or social limitations based on gender on phone use. This could be attributed to the limited role of the male counterparts in the lives of these women. These women owned their mobile phones and determined how best to use them. The cultural nuances and social practices were allowing for phone sharing. The power paradigm came from within the family structure as two of the respondents were older sisters making use of their younger sister's phone. Shared access was due to the fact that they could provide the mobile phone credit but did not want to own the type of phone. The one hairdresser employed her sister in the business thus having access to her phone whenever necessary. However for the other respondent, access was limited to the time that she would be around her sibling with the Internet enabled mobile phone as they did not work together. This finding is distinct to the sample; however it indicates phone sharing practices amongst family members that could limit or enable development and growth for women.

6 Conclusion

In conclusion, the research looked at the way women made use of mobile phones to enhance their wellbeing and their business. The research focused on women who owned business in the informal sector. Entering the informal sector was a strategy for the women to provide for themselves and their families in instances where the formal sector had failed. Development and growth provided a framework that could capture the extent of benefits and limitations for women in their use mobile phones. The conceptual framework enabled the research to acknowledge the intertwined relationship between social context and technology. The emphasis for potential of development and growth through digital inclusion was placed on the use of mobile phones than access. The understanding of development through social inclusion and inclusive growth (Warschauer, 2003; Heintz 2012), meant that the analysis of data focused on the four resources identified as physical, digital, human and social to assess outcomes of mobile phone use. Mobile phones have been seen to be able to play a role in improving peoples' lives and their income strategies in developing countries. As this study illustrated, women have incorporated the mobile phone as a tool to which they draw from its functions to enhance and effectively use in their line of work thus impacting on their quality of life.

The social inclusion experienced by women has provided a way for them to be in charge of their daily activities in ways that best suit them and their needs. Inclusive growth is also made possible in improving on the efficiency of business practices already set up. It was not possible to ascertain the extent of the significance in change through effective and efficient communication with quantifiable measures as there was no record keeping. Women have made use of mobile phones within contexts of poverty and a social structure that has led them into setting up micro-businesses in the informal sector. Increased efficiency and effectiveness were made possible because of the receptive lines of businesses they were in as customers accepted use of mobile phones for communication. Utilization of the Internet, social media and instant messaging were recognized as key for the businesses in effective marketing of their

businesses. Facebook and Whatsapp were identified as the most important forms of social media and instant messaging. There was no distinction between the personal and business sites and applications of the owner indicating a blurring between personal and business use.

Challenges that were faced by the women were beyond the functions of their mobile phones as these were structurally based. Issues of crime, education and managing of finances were challenges to the women in terms of managing their business, which would hinder on their personal development. Women were operating on a cash basis and were not making use of banking facilities to keep their money. Exclusion from the formal banking system left them exposed to criminals targeting their earnings. Mobile phones were not being used innovatively as part of the solution in terms of using mobile money or calling other individuals for help when in danger. Therefore mobile phones do allow for the process of social inclusion and growth but the extent is greatly determined by the form of resources; the extent the resources can be used and whether the context allows for this utilization. This study has gone to use a framework of development and growth to show the different gains for women in use of mobile phones rather than access. Limitations for effective social inclusion and growth are attributed to education and incomes, social context in which women operate their business. These limitations impacts on the way mobile phones are used to contribute to development and growth. Thus this study has contributed to the growing body of literature by presenting the perceived benefits by women and highlighting the importance of context.

In carrying out this research, there were the author's limitations experienced that impacted on the information gathered. First area of concern was limited knowledge of language of respondents. In order to deal with the issue of language and access, I employed the help of local community members who spoke the language of the respondents and had access. However in structuring the questions perhaps the questions should have been written in the local language rather than translated from English to Xhosa as often direct translation did not deliver the intended meaning of questions. In regards to language as well, the interviews were

transcribed directly from Xhosa to English, which meant that meaning was lost in language translation, impacting on the findings. There were points that could have been interrogated further during the process of questioning that were only picked up upon transcribing. All of the respondents were on the MTN network but there was no questioning on why they chose one of the expensive networks and how effective it was for them. Setting up follow up interviews was difficult as the timing to for them was difficult to set up. As the data collection process consisted of observation and recordings, there were problems faced with carrying out observations using photography. The respondents' customers, other business operators and the respondents themselves were hesitant to allow for photographic capture. Respondents signaled that we had to be aware of our own safety. The study was also based in specific townships focusing on particular sub set of the South African population, which limits generalizability. However the aim of this study was not to provide a generalization.

If this study could be carried on further a larger diverse sample industries and races would be important for further exploring the findings. By having a larger representative sample, it would highlight if experiences in using mobile phones for women in the lower income-earning bracket are similar. Whilst gendered power paradigms were not picked as men were not part of family structures or significant, it would be key to have a mixed sample with individuals in partnerships with male counterparts to explore gender based inequalities. Furthermore the concept of social inclusion would need to be assessing gender based points of inclusion; whether men experience a higher point of inclusion than women. Further research could focus more specifically on use of mobile Internet by entrepreneurs and the challenges and opportunities from it. This might require a participative form of methodology where the researcher becomes part of the respondent's social media campaign. It would also be important to bring in individuals from different industries to assess the extent to which the line of business facilitates the use of mobile phones. Another area of further research would be to investigate why respondents end up on particular networks, especially in cases where they are on networks identified as expensive. In seeking to make use mobile phones as part of the solution to improving women's quality of life there is need to address other challenges that

stem from context and capabilities. One can look at the challenges of crime as they operate on cash basis and do not have bank accounts. Mobile money adoption could provide as a solution for these women where they gradually move away from using cash in their interactions even when they do not have bank accounts. This would be a safety measure as well. Based on the findings of this study, an area of concern is the need for mobile network operators to play a proactive role in their around the retail pricing of air time by their vendors. Where retailer are selling at above market price there needs to be stricter monitoring and regulation.

As the target of the ICT vision 2020 of South Africa is to eradicate the digital divide, there is need to focus on issues around use of the Internet for those in micro-businesses and how it may impact on them and their businesses. The focus should rather be to provide enabling mechanisms that would improve on the skill set of women in the informal sector. In instances where women have been identified to incorporate mobile phones into their work, education on fully utilizing the potential of their phone should be a priority. For example benefits of using other areas of the internet to gain information for the purposes of their businesses may be stressed. In terms of use of digital resources, there needs to be a platform that provides information for women in business on how they could improve their business entities. This is an initiative that would require context-based designs to meet the needs of women in these varying industries. A partnership with relevant institutions to design application for feature phones or make use of the SMS function on basic phone would be crucial to see an improvement of women livelihood strategies. Educating women and designing mobile tools relevant to them would be important for purposes of inclusion and growth for women in operating micro-businesses in the informal sector.

7 Appendices

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Appendix 2: coding

1. Reasons for getting into business

- Lack of job opportunities-unable to get a job to earn income
- Frustration with previous employment-disgruntled by previous work
- Financial independence-being able to have an income
- Family business-moving into employment that was set up

2. Reasons for particular line of business

- Skill set-the ease of acquisition of skill required
- Move into already established business
- Educational background-application of business knowledge
- Snowball effect-business generated by plaiting one person and others coming in
- Specialization
- Opportunity-identifying a market gap

3. Management of business

- Lack of records-no record books kept for business activities
- Management of finances-how they organized their finances
- Decision making process-extent of control on decisions for the business
- Use of income-how the money made from business was used

4. Communication/interaction with customers

- Walk in customers-new clients that come to the business
- Credit-customers given credit on basis of trust and retaining customers
- Customers communicating with the business owner
- Business owner contacting customers

5. Relationship/Communication/interaction with suppliers

- Sourcing of supplies
- Payment- how the respondents pay for their supplies
- Communication with suppliers
-

6. Marketing/advertising

- Sign-some form of mark advertising business
- Verbal marketing-face to face communication
- Number distribution
- Social media and instant messages

7. Phone use in business

- Voice calls-making use of voice calls in business
- SMS-instances where SMSs are used in business
- Call backs-situations where call backs are used
- Internet use-ways in which the Internet is used, (data bundles)
- Perception of phone-the perceived importance of the phone

8. Challenges

- Autonomy-extent to which they can make decisions
- Crime- experience of criminal activities due to business
- Expenses such as airtime
- Seasonal business-peak and off peak times

Appendix 3: Interview Schedule

Interview questions translated into Xhosa during interviews.

Section 1: Business questions

1. -What is your business about? (What you do, when you started it and how many people are parts of it)
2. In what way did/do you fund your business?
3. -How do you manage your business? (Getting supplies, getting customers, finances like bank accounts and records, the decision making process, in instances where they might need extra cash to buy supplies)
4. Who are your customers?
5. How do you spend the income you get from the business?

6. What is it like to be a woman running a business? Describe how you experience being a woman in the family, who is in charge of issues like cash flow, airtime and other aspects of living.

Section 2: Mobile phone use

7 -Do you own a mobile phone?

8 -How long have you been using your phone for business?

9 -In what ways have you used your phone in your business?

10 -How did you run business before the mobile phone?

11 -Do you get any business related information about your business from your phone? (If not where do they get business information)

12 -Do you advertise your business with your phone?

13 -What other ways might your phone be used for at work?

Section 3: Impact of business and mobile phone

14 -What made you decide to use your cell phone in your business? (do you find it important to have a mobile phone)

15 -What does it mean to be able to have a phone when running your business?

16 -Where do you see your business going/what are your future plans?

Demographics

Age:

Educational qualifications:

Residential History:

Marital status:

Spouse/ partner's economic activity:

Household composition:

Dependants: